In-Country Value Application

Understanding ICV Pillars and Practices

Edited by
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شركة تنمية نفط عمان
Petroleum Development Oman

Wealth
Financial Consultants

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Understanding ICV Pillars and Practices

1st Edition

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Petroleum Development Oman

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Chapter 1

In-Country Value Strategies

Dr Hidaya Al-Lawati



Abstract

The concept of In-Country Value (ICV) is pivotal for fostering sustainable economic growth and development within host nations. This chapter delves into the fundamental principles and strategic approaches that underpin ICV initiatives, particularly within the context of multinational corporations operating in diverse industries. We explore core principles such as local content development, job creation, skills enhancement, technology transfer, supplier development, and community engagement. Each principle is illustrated with practical examples, demonstrating how businesses can leverage ICV strategies to stimulate local economies, promote industrial growth, and build resilient supply chains. By prioritizing local procurement, investing in human capital, fostering innovation through technology transfer, and engaging with local communities, companies can create shared value that aligns with both corporate objectives and national development goals. This chapter provides a comprehensive framework for understanding and implementing ICV, highlighting its critical role in achieving long-term economic diversification and sustainability.

Keywords: *In-Country Value (ICV), ICV strategies, ICV principles, ICV challenges, oil and gas sector, GCC*



Learning Objectives:

- To understand the concept of In-Country Value (ICV) and its significance in business.
- To evaluate the key principles of ICV implementation.
- To analyse different strategies for enhancing ICV within an organization.
- To evaluate effective ICV strategies: overview of multiple strategies used to implement ICV initiatives.
- To analyse the diverse risks and challenges that governments and companies encounter when implementing ICV programmes .
- To understand the role of policy and regulation in ICV implementation.
- To analyse examples of ICV implementation from the oil and gas sector.

Introduction

In-Country Value (ICV) refers to a set of policies and practices aimed at maximizing the contribution of a business's activities to the economic development of the country or region where it operates. The concept emphasizes local content, job creation, technology transfer, and overall economic diversification of the local community in which it operates. In addition, ICV programmes have the following goals:

- **Economic Growth:** Enhancing local GDP by procuring more goods and services domestically, boosting foreign direct investment, and increasing the GDP contribution from the private sector and SMEs.
- **Workforce Development:** Generating additional job opportunities for local citizens and enhancing the skills of the local workforce.
- **Technological Advancement:** Increasing investment in R&D, improving the competitiveness of national industries, and advancing technology development and implementation.

For multinational corporations and businesses operating in various regions, implementing ICV principles is crucial for building sustainable relationships with local communities, governments, and stakeholders (Al-Alawi *et al.*, 2023). ICV has emerged as a critical framework for businesses operating in diverse global landscapes, particularly in industries like oil and gas, mining, construction, and manufacturing. At its core, ICV represents a strategic approach that prioritizes local economic development and sustainable growth through the optimization of business activities within a specific country or region. For multinational corporations, understanding and implementing ICV principles is vital for building strong relationships with local stakeholders, governments, and communities (Al-Alawi *et al.*, 2023). The implementation of ICV strategies can take various forms, ranging from sourcing goods and services from local suppliers to investing in training and skill development programmes for the local workforce (Al-Alawi *et al.*, 2023).

In the Gulf Cooperation Council (GCC) region, ICV has gained significant importance as governments aim to diversify their economies away from overreliance on hydrocarbons (Khan & Al-Ghamdi, 2023). The implementation of ICV strategies is seen as a catalyst for sustainable economic growth and job creation for the local population. For instance, in Saudi Arabia, the In-Kingdom Total Value Add (IKTVA) programme, launched by Saudi Aramco in 2015, aims to double the percentage of locally manufactured energy-related goods and services to 70% by 2030 (Saudi Aramco, 2021). Similarly, the United Arab Emirates has introduced the In-Country Value (ICV) programme to enhance the country's industrial capabilities and create employment opportunities for Emiratis (ADNOC, 2022). In Oman, the In-Country Value Blueprint Strategy 2021–2040 aims

to maximize the contribution of the energy sector to the country's GDP, create job opportunities for Omanis, and develop local capabilities (Ministry of Energy and Minerals, 2021). The strategy sets targets for local manufacturing, procurement of goods and services, and investment in research and development.

By prioritizing local content and capabilities, businesses operating in the GCC region can foster economic growth, create job opportunities, and contribute to the overall development of the region. For example, a study by the Gulf Petrochemicals and Chemicals Association (GPCA) found that every $1 billion invested in the petrochemical industry in the GCC creates approximately 212,000 jobs across various sectors (GPCA, 2019).

Governments play a crucial role in mitigating these risks and fostering an environment conducive to successful ICV implementation (Shezawi & Khan, 2018). Policies and regulations are designed to support local economic development and ensure that the benefits of major industrial projects are retained within the country. For example, many countries in the GCC have established national ICV programmes that mandate minimum levels of local sourcing, employment, and training. These programmes are supported by policies that provide tax incentives, financial support, and preferential procurement processes for companies that meet ICV criteria. Additionally, governments often establish robust oversight and enforcement mechanisms to ensure compliance with ICV policies, fostering transparency and accountability. In Oman, the government has introduced guidelines and key performance indicators to enhance ICV and facilitate close communication among stakeholders. These measures, along with regular monitoring and reporting, help in identifying new opportunities and addressing gaps, ensuring that ICV programmes contribute effectively to national development objectives while promoting sustainable and inclusive economic growth.

This chapter explores the guiding principles and strategies, strategic approaches, and best practices that underpin effective ICV implementation. Through a comprehensive examination of ICV, businesses can align their operations with the economic development goals of host nations, drive positive change, and create lasting impacts within the communities they serve.

The Significance of ICV

The concept of ICV holds profound significance in today's interconnected world economy. It underscores the notion that businesses should not only pursue profitability but also contribute meaningfully to the economic prosperity of the regions where they operate. This shift in perspective aligns with broader global trends emphasizing corporate social responsibility (CSR), sustainable development goals (SDGs), and inclusive economic growth (Almaraz *et al.*, 2024).

In many countries, particularly those rich in natural resources like oil, gas, or minerals, ICV has become a focal point for policymakers seeking to maximize the benefits of resource extraction for local populations. By encouraging companies to prioritize local content, job creation, and technology transfer, governments aim to foster broader economic diversification, reduce dependency on volatile commodity markets, and enhance overall social welfare.

Key Principles of ICV

To grasp the essence of ICV, it's essential to delve into its core principles:

1. **Job Creation and Skills Development:** ICV promotes employment opportunities for residents and invests in skills development initiatives to enhance the employability and productivity of the workforce (Al-Alawi *et al*., 2023). This not only addresses unemployment challenges but also fosters long-term economic empowerment. For instance, a multinational corporation establishes a subsidiary in a foreign country and implements training programmes to upskill and empower local employees. By providing opportunities for career advancement and professional development, the company strengthens the local workforce and fosters economic empowerment.

CASE STUDY 1: Developing Skills of Omani Graduates

Petrofac recruited 22 graduates specifically for work on the facility, integrating them into the company's extensive graduate program facilitated by the Petrofac Academy. These graduates received structured training in Muscat and Sharjah and participated in study trips to Europe and China. Additionally, they gained practical experience in India. This comprehensive training equipped them with a solid theoretical foundation, which was further enhanced through hands-on, on-site training. They quickly became integral members of the project teams. Bahram mentions, alongside structured training in Muscat and Sharjah, some graduates were sent to our offices in India and undertook study trips to key vendors in Europe and China. As a result, they arrived on-site with a robust theoretical background, which we supplemented with practical, on-the-job training. Their swift transition to becoming valuable team members was remarkable. We are immensely proud of all the graduates, especially Abdulallah Albalushi and Yaqdhan Alsharj. They were instrumental during the design phase and the challenging brownfield segment of the project, where Phase 2 integrated with the live production facilities of Phase 1. Their energy and determination were truly commendable.

Source: In country value (petrofac.com)

2. **Technology Transfer and Innovation:** Encouraging the transfer of technology, knowledge, and best practices to local partners and institutions is integral to ICV (Malik & Al-Toubi, 2018). By facilitating technology diffusion, businesses can catalyse industrial growth and nurture innovation ecosystems. For instance, a foreign technology company partners with a local university or research institution to establish a technology transfer programme. Through collaborative research projects and knowledge-sharing initiatives, the company helps build local research and development capabilities and supports the commercialization of innovative technologies.

3. **Supplier Development:** Strengthening local supplier networks through capacity-building programmes and partnerships is a cornerstone of ICV (Shezawi & Khan, 2018). Empowering local businesses to meet international standards enhances competitiveness and promotes inclusive economic participation. For instance, a government enacts legislation requiring energy companies operating in the country to source a certain percentage of goods and services locally for their oil and gas projects. This may include using local suppliers for equipment, hiring local workforce, and subcontracting local companies for ancillary services.

4. **Community Engagement:** Engaging with local communities in a meaningful way goes beyond humanity. It involves understanding community needs, addressing social challenges, and co-creating solutions that generate lasting benefits. For instance, a mining company operating in a developing country implements initiatives to mitigate environmental risks and support local communities affected by its operations. This may include implementing environmental conservation measures, investing in community development projects, and providing support for local education and healthcare initiatives.

ICV in Practice

Implementing ICV requires a holistic approach that integrates these principles into corporate strategies and operational frameworks. For example, a multinational oil company operating in a developing country might adopt ICV by sourcing drilling equipment from local manufacturers, employing and training local technicians, and investing in social projects that improve healthcare and education in nearby communities.

ICV Core Ethical Principles and Professional Standards

ICV is governed with principles that align closely with the core ethical principles and professional standards that guide the practice of business professionals (Al Shezawi & Khan, 2018; In-Country Value Certification User Guidelines, 2020):

Integrity

This refers to the quality of being honest, ethical, and principled in all business activities. Business professionals are expected to act with honesty, fairness, and transparency in their dealings with stakeholders, including clients, employees, investors, and the public.

Example: A CEO of a multinational corporation demonstrates integrity by being transparent about the company's ICV plan, implementation, and financial performance, disclosing relevant information to shareholders and the public, and adhering to ethical business practices, even in challenging situations.

Objectivity

This requires business professionals to maintain impartiality and avoid biases or conflicts of interest that could compromise their judgment. They must base their decisions and recommendations on factual evidence and logical analysis, rather than personal preferences or external influences.

Example: A financial analyst provides objective investment recommendations to clients by conducting thorough research and analysis of market trends, company financials, and industry dynamics. The analyst presents unbiased insights and recommendations, regardless of personal opinions or affiliations.

Independence

This involves maintaining independence in both appearance and fact, avoiding any relationships or circumstances that could impair one's ability to act in the best interests of stakeholders. Business professionals should exercise independent judgment and avoid undue influence or conflicts of interest.

Example: An external auditor conducts an independent audit of a company's financial statements, ensuring that the audit process remains free from undue influence or pressure from management. The auditor maintains independence by adhering to professional auditing standards and avoiding conflicts of interest.

Professional Competence & Due Care

This entails possessing the necessary knowledge, skills, and expertise to perform business activities competently and diligently. Business professionals should stay informed about industry trends, regulations, and best practices and apply their expertise to achieve high-quality outcomes.

Example: A project manager demonstrates professional competence by effectively managing project timelines, resources, and budgets, and proactively addressing potential risks and challenges. The project manager stays updated on project management methodologies and best practices to deliver successful project outcomes.

Confidentiality

This requires business professionals to protect sensitive information obtained during their professional engagements and refrain from disclosing such information to unauthorized parties. They must respect the privacy and confidentiality of client data, proprietary information, and trade secrets.

Example: A human resources manager maintains confidentiality by safeguarding employee personnel files, salary information, and performance evaluations. The manager ensures that sensitive employee information is accessed only by authorized personnel and is not disclosed without proper authorization.

Professional Behaviour

This involves adhering to ethical norms and standards of conduct in all professional interactions and communications. Business professionals should act with integrity, honesty, and professionalism, treating others with respect and courtesy.

Example: A sales representative demonstrates professional behaviour by building trusting relationships with clients, providing accurate product information, and addressing customer concerns promptly and courteously. The sales representative acts ethically and responsibly in all business dealings.

Technical Standards

These refer to the established guidelines, principles, and best practices that govern business activities and ensure consistency and reliability in decision-making and operations. Business professionals must adhere to relevant technical standards and regulations issued by regulatory bodies and industry organizations.

Example: A financial analyst follows the Financial Accounting Standards Board (FASB) standards and Generally Accepted Accounting Principles (GAAP) when preparing financial reports and statements for stakeholders. Adhering to these technical standards ensures the accuracy, consistency, and comparability of financial information.

Strategies for Enhancing ICV

Implementing effective ICV strategies requires a holistic approach that integrates local content, job creation, technology transfer, supplier development, and community engagement. Let's delve into specific strategies that organizations can adopt to maximize their ICV impact:

Supplier Localization

Develop partnerships with local suppliers and contractors to increase the sourcing of goods and services from within the country. This can involve supplier capacity-building programmes and long-term collaborations.

Approaches:

- **Supplier Development Programmes:** Collaborate with local suppliers to enhance their capabilities, quality standards, and scalability. Provide training, technology transfer, and financial support to strengthen their capacity.
- **Local Content Requirements:** Establish policies that mandate a certain percentage of goods and services to be sourced locally. This encourages the growth of indigenous industries and reduces reliance on imports (Delabre *et al.*, 2020).
- **Supplier Diversity Initiatives:** Promote diversity within the supplier base by engaging with SMEs, women-owned businesses, and minority-owned enterprises.

Benefits: Supplier localization not only stimulates the local economy but also builds resilience by reducing supply chain risks and fostering long-term partnerships with local businesses.

Skills Development Programmes

Invest in training and development programmes that enhance the skills of local employees. This can include vocational training, apprenticeships, and leadership development initiatives.

Approaches:

- **Vocational Training Programmes:** Collaborate with educational institutions to offer vocational training in areas relevant to the organization's operations (e.g. technical skills for manufacturing, engineering, or IT).
- **Apprenticeship Programmes:** Provide opportunities for young professionals to gain hands-on experience and mentorship within the organization.
- **Leadership Development:** Identify and nurture local talent for leadership positions through targeted development initiatives and succession planning.

Benefits: By developing local talent, organizations create a skilled workforce that can drive innovation, productivity, and economic growth within the community.

Technology Transfer Initiatives

Establish mechanisms to transfer advanced technologies and technical know-how to local entities (Shezawi *et al.*, 2018). This could involve joint ventures, licensing agreements, or knowledge-sharing platforms.

Approaches

- **Joint Ventures and Collaborative Research:** Partner with local research institutions, universities, and technology startups to co-develop innovative solutions and leverage local expertise.
- **Licensing and Knowledge Sharing:** Transfer proprietary technologies and intellectual property to local entities through licensing agreements or knowledge-sharing platforms.
- **Innovation Challenges and Competitions:** Organize competitions or challenges to encourage local entrepreneurs and innovators to solve industry-specific problems.

Benefits: Technology transfer not only enhances local capabilities but also drives economic diversification and promotes indigenous innovation.

Community Investment and Social Responsibility

Implement corporate social responsibility (CSR) programmes that address key social issues within the local community (Shezawi *et al.*, 2018). This can include education, healthcare, infrastructure development, and environmental conservation efforts.

Approaches

- **Healthcare and Education Initiatives:** Invest in healthcare infrastructure, medical services, and educational programmes to improve the well-being and quality of life for local communities.
- **Infrastructure Development:** Support projects that enhance local infrastructure, such as road construction, water supply systems, and renewable energy installations.
- **Environmental Stewardship:** Implement sustainable practices and conservation projects that mitigate environmental impact and promote eco-friendly operations.

Benefits: Community investment and CSRs build trust, foster goodwill, and enhance the company's social licence to operate, creating shared value for both the organization and local stakeholders.

Monitoring and Reporting

Develop robust monitoring and reporting systems to track ICV performance indicators. Regularly assess and report on the economic impact of business operations on the local economy.

Approaches

- **Key Performance Indicators (KPIs):** Define and measure ICV-related KPIs, such as local spend percentage, job creation metrics, technology transfer index, and community engagement scores.
- **Regular Audits and Impact Assessments:** Conduct regular audits to evaluate compliance with ICV policies and assess the effectiveness of implemented strategies.
- **Transparent Reporting:** Publish ICV performance reports for key stakeholders, demonstrating commitment to transparency and accountability in local value creation efforts.

Benefits: Monitoring and reporting ICV performance enhances accountability, informs strategic decision-making, and enables continuous improvement in ICV initiatives.

Various countries have developed frameworks and strategies tailored to their unique economic and industrial contexts. The following examples present key ICV strategies and best practices from different regions, including Norway, Brazil, and India, to provide a comprehensive understanding of how ICV initiatives can be effectively implemented. These examples provide valuable insights into how different countries have successfully implemented ICV initiatives to enhance local economic development, build human capital, and strengthen local industries.

It is worth mentioning that Norway was among the pioneers in driving the idea behind encouraging local participation in supply chains (Ryggvik, 2015). Initially, the country primarily relied on foreign companies for the development of oil and gas resources within its territory. Norway has seen significant success from its localization policies. By focusing on skill transfer and increasing local expertise, numerous professional services companies, such as PGC, Seadrill, and Aker Solutions, now supply oil and gas products and services globally. In fact, Norwegian companies are responsible for 10% of all international services contracts. Emphasizing the adoption of advanced technology and knowledge transfer has enabled Norway to develop one of the most advanced oil and gas sectors in the world.

CASE STUDY 2: Successful ICV Strategies by Brazil's Petroleum Industry

Best Practices:

Local Content Laws: Brazil's National Petroleum Agency (ANP) has set mandatory local content requirements for all oil and gas contracts. These laws require a specific percentage of goods and services to be sourced locally, thereby driving investments in domestic industries.

Supplier Development Programs: The ANP and Petrobras, Brazil's state-controlled oil company, have developed extensive supplier development programs. These programs focus on building the capabilities of local suppliers through training, mentoring, and financial support.

Regulatory Framework: A robust regulatory framework that incentivizes compliance with local content requirements through tax benefits and preferential treatment in bidding processes.

Petrobras' Local Content Policy:

Petrobras has played a pivotal role in implementing Brazil's local content policy. By mandating high local content in its contracts, Petrobras has stimulated the growth of Brazil's oil and gas supply chain. The company has invested heavily in training programs to enhance the skills of local workers and improve the quality of locally produced goods and services. This approach has not only strengthened Brazil's industrial base but also increased the country's self-sufficiency in oil and gas operations.

Sources:

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- Brazilian Ministry of Mines and Energy. (n.d.). Local Content and Supplier Development. Retrieved from Brazilian Ministry of Mines and Energy

CASE STUDY 3: Successful ICV Strategies by India's Defence and Aerospace Sector

Best Practices:

Make in India Initiative: The Indian government's "Make in India" initiative encourages foreign companies to manufacture within the country, promoting technology transfer and local employment. This initiative has been particularly impactful in the defense and aerospace sectors.

Offset Policy: India's defense procurement policy includes an offset clause, requiring foreign suppliers to invest a portion of the contract value back into the Indian economy. This can be through direct investment, technology transfer, or training and development programs.

HAL and Boeing Partnership:

Hindustan Aeronautics Limited (HAL) and Boeing have partnered under the "Make in India" initiative to manufacture components for the Boeing 737 and 787 aircraft in India. This partnership has led to significant investments in local manufacturing facilities, creating thousands of jobs and enhancing the skills of Indian workers. Additionally, Boeing's commitment to sourcing from Indian suppliers has boosted the local aerospace supply chain, fostering innovation and competitiveness in the sector.

Sources:

- Ministry of Defence, Government of India. (n.d.). Make in India Initiative. Retrieved from Make in India
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The Key Takeaways

1. **Regulatory Support and Enforcement:** All three countries demonstrate the importance of a strong regulatory framework to enforce ICV requirements. Norway's stringent local content laws, Brazil's ANP regulations, and India's offset policy are pivotal in ensuring compliance and driving local value creation.

1. **Collaboration and Partnerships:** Collaboration between government, industry, and academia is essential. Norway's innovation clusters, Brazil's supplier development programmes, and India's Make in India partnerships highlight how cooperation can lead to successful ICV implementation.

1. **Capacity Building and Skills Development:** Investing in local human capital through training and development programmes is crucial. Norway's technology centres, Brazil's training initiatives by Petrobras, and India's skill development programmes under the Make in India initiative emphasize the need to build a skilled workforce to support local industries.

2. **Long-term Commitment:** Effective ICV strategies require long-term commitment from all stakeholders. Continuous investment in local capabilities and infrastructure, as seen in these case studies, is necessary to sustain economic growth and development.

Effective implementation of ICV strategies requires a multifaceted approach that includes strategic planning, stakeholder engagement, capacity building, and continuous monitoring and evaluation. By learning from the best practices and successes of Norway, Brazil, and India, other countries can leverage such knowledge and refine their own ICV frameworks to achieve sustainable economic growth and development.

The Role of Policy and Regulations in Shaping ICV

Governmental policies and regulations play a pivotal role in shaping and driving ICV strategies within a country or region (Leavesley *et al.*, 2022). Policymakers can institute various measures, such as local content requirements, tax incentives, and procurement policies, to incentivize businesses to prioritize local participation in their value chains. For instance, many countries in the GCC have implemented national ICV programmes that mandate minimum levels of local sourcing, employment, and training for companies operating in strategic sectors like oil and gas, construction, and infrastructure development. Such regulatory frameworks create a conducive environment for businesses to align their operations with national development goals, while also providing a level playing field for local companies to compete and contribute

to economic diversification efforts (Kalyuzhnova, 2018). Furthermore, governments can leverage their oversight and enforcement capabilities to ensure compliance with ICV policies, fostering transparency and accountability in the implementation of local content initiatives.

To enhance ICV, governments can implement various initiatives aimed at strengthening the local economy and ensuring that economic activities benefit the country and its citizens. Key initiatives include upscaling the workforce, maximizing local sourcing and contracting, increasing nationalization programmes, adding social responsibility programmes, and providing tax incentives.

Upskilling the Local Workforce:

One of the primary initiatives that a government can undertake is upskilling the workforce. This involves investing in education and training programmes that equip the local workforce with the skills required in various industries, particularly those critical to the economy such as oil and gas, manufacturing, and technology. Moreover, in the era of Industry 5.0 where advanced technology driven by AI is altering the future of work, it is becoming an imperative that the local workforce's skills and knowledge be aligned with future needs. This may be achieved by collaborating with educational institutions and industry partners, and governments can develop specialized training programmes, apprenticeship schemes, and continuous professional development courses. These efforts not only enhance the employability of the local population but also ensure that industries have access to a skilled local workforce, thereby reducing reliance on foreign expertise and promoting sustainable economic growth. Two excellent examples of the impact of upskilling local workforce capacity are Malaysia and Taiwan. With a highly skilled large pool of technical workforce in these countries, global brands such as the semi-conductor manufacturing giant Intel are making huge investments in both these countries.

Maximizing Local Sourcing and Contracting:

Maximizing local sourcing and contracting is another crucial initiative. Governments can implement policies that require a certain percentage of goods and services to be sourced locally in both public and private sector projects. This can be achieved through local content requirements in contracts, encouraging businesses to partner with local suppliers, and providing incentives for companies that prioritize local procurement. Such policies stimulate the growth of local industries, create job opportunities, and foster a more self-reliant economy. Additionally, they can help develop a robust supply chain that supports the needs of various sectors, thereby enhancing the overall economic resilience of the country.

Increasing Nationalization Programmes:

Increasing nationalization programmes is a strategic initiative to ensure that citizens benefit directly from economic activities. These programmes aim to increase the employment of nationals in key industries by setting employment targets, providing training and development opportunities, and offering incentives to companies that hire local talent. By prioritizing the employment of nationals, governments can reduce unemployment rates, improve the standard of living, and ensure that the wealth generated by national resources remains within the country. Nationalization programmes also help build a sense of ownership and pride among the local population, further strengthening social cohesion and economic stability.

Adding Social Responsibility Programmes:

Incorporating social responsibility programmes into ICV strategies can have a profound impact on community development (Al-Alawi *et al*., 2023). Governments can encourage businesses to engage in activities that benefit society, such as investing in local infrastructure, supporting healthcare and education initiatives, and promoting environmental sustainability. By integrating CSR into their operations, companies can contribute to the overall well-being of the communities in which they operate. This not only enhances the reputation of businesses but also fosters a more inclusive and equitable economic development model. Social responsibility programmes can also address specific societal needs, such as poverty reduction, access to clean water, and renewable energy projects.

Providing Tax Incentives:

Tax incentives are powerful tools that governments can use to attract investment and stimulate economic activity (Zee *et al*., 2002). By offering tax breaks, deductions, or credits to companies that invest in local production, hire nationals, or engage in CSR activities, governments can create a favourable business environment that encourages the growth of local industries. These incentives can lower the cost of doing business, making it more attractive for both domestic and foreign companies to invest in the country. Furthermore, tax incentives can be strategically targeted to support emerging sectors, drive innovation, and enhance competitiveness. This approach not only boosts economic growth but also ensures that the benefits of such growth are widely distributed among the population.

CASE STUDY 4: The Role of Policy and Regulation in ICV (GCC Examples)

We will outline some cases from the GCC region where specific tax regulations and incentives have been implemented to enhance ICV:

United Arab Emirates:

- The UAE has implemented a corporate tax incentive for companies that meet certain ICV targets. Companies that achieve high ICV scores (based on factors like local procurement, employment of UAE nationals, and investments in R&D) can benefit from reduced corporate tax rates (UAE Ministry of Industry and Advanced Technology, 2022).
- The Dubai Investment Development Agency (Dubai FDI) offers a range of incentives, including tax exemptions and fee waivers, for companies that invest in strategic sectors and contribute to the emirate's economic diversification and ICV goals (Dubai FDI, 2021).

Saudi Arabia:

- Under the IKTVA programme by Saudi Aramco, companies that increase their local content and investment in the kingdom are eligible for tax incentives and preferential treatment in procurement processes (Saudi Aramco, 2021).
- The Saudi Industrial Development Fund (SIDF) provides tax exemptions and other financial incentives for companies that establish manufacturing facilities in the country and contribute to job creation and local content development (SIDF, 2022).

Oman:

- The Omani government offers tax incentives, such as corporate tax exemptions and customs duty exemptions, for companies that invest in specific sectors and contribute to the country's ICV goals, particularly in the areas of manufacturing, logistics, and technology (Oman Investment Authority, 2021).

Qatar:

- The Qatar Investment Free Zones Authority offers tax incentives, including a 20-year corporate tax holiday and exemptions from customs duties, for companies operating in free zones and contributing to the country's economic diversification and ICV objectives (Qatar Free Zones Authority, 2022).

These examples illustrate how GCC governments have leveraged tax regulations and incentives as policy tools to encourage businesses to prioritize local content, invest in local capabilities, and support the region's economic diversification efforts through their ICV strategies.

Through these initiatives, governments can effectively enhance ICV, promote sustainable economic development, and ensure that the benefits of national resources and economic activities are maximized for the country and its citizens. By focusing on workforce development, local procurement, nationalization, social responsibility, and tax incentives, governments can create a more resilient and inclusive economy.

Risks and Challenges Associated with ICV Implementation

Implementing ICV programmes presents a variety of risks and challenges that can significantly impact their success. Economically, fluctuations in global market conditions, such as volatile oil prices and currency exchange rates, can affect the financial stability necessary for sustaining ICV initiatives (Al Hadhrami & Sharifi, 2016). These economic uncertainties can lead to reduced government revenues and diminished fiscal space, hampering the ability to support ICV programmes through subsidies or other financial incentives. Politically, changes in government policies or regulatory frameworks can create an unpredictable environment, necessitating quick adaptation and robust risk management strategies by businesses (Kobrin, 2022). Operationally, challenges such as supply chain disruptions, infrastructure inadequacies, and a lack of local expertise can hinder the effective implementation of ICV programmes. For instance, in regions with underdeveloped infrastructure, logistical hurdles can delay project timelines and increase costs, while insufficient local skills can necessitate continued reliance on foreign expertise, undermining the goals of ICV initiatives.

Implementing ICV is a complex process that demands meticulous planning, robust policy frameworks, and ongoing stakeholder engagement. As countries pursue this path, they need to balance short-term economic effects with long-term strategic objectives, ensuring that ICV programmes contribute positively to national development goals without hindering industrial innovation or global competitiveness. Implementing ICV programmes involves navigating a range of comprehensive risks that can significantly impact their success. For instance, currency fluctuations and access to capital can undermine the financial stability essential for ICV initiatives. Furthermore, shifts in government policies or regulatory environments can abruptly change the landscape, necessitating swift adaptation and strong risk management strategies. In terms of operational goals, challenges such as supply chain disruptions or infrastructure

deficiencies can hinder the effective implementation of ICV, affecting production timelines and workforce efficiency.

To illustrate the potential risks, a suitable example is Oman's economy, which is significantly influenced by its oil exports, with revenue primarily generated in US dollars. The volatility of oil prices can lead to substantial fluctuations in the national budget (Echchabi & Azouzi, 2017), impacting the government's ability to fund and invest in key sectors that support ICV initiatives. When oil prices fall, the government's financial capacity to provide subsidies or other incentives for ICV programmes is constrained, limiting their effectiveness and reach.

Recognizing and managing these risks is crucial for any organization seeking to power ICV for sustainable business growth and local economic development. Effective ICV strategies must adopt a holistic approach that incorporates economic, social, and environmental factors, promoting a sustainable and inclusive growth model that benefits all stakeholders. By thoughtfully designing and executing these initiatives, governments can build a more resilient and self-sufficient economy, decrease reliance on external resources, and ensure that the wealth generated by key industries, such as oil and gas, substantially supports the national development agenda.

The ICV requirements, policies, and programmes are designed to promote economic development by mandating companies to implement projects through local tendering processes or report their resources in ICV certification from the domestic market where they operate. These policies are particularly prevalent in resource-rich countries and are applied across a range of industries including oil and gas, mining, and renewable energy. While the primary goals of ICV programmes are to boost job creation, foster industrial development, and retain a greater share of project value within local economies, their implementation often faces a multitude of challenges that can diminish their effectiveness and impact.

Globally, the challenges of implementing ICV programmes stem from the delicate balance between promoting local industries and maintaining project efficiency and competitiveness (Kalyuzhnova *et al*., 2016). These challenges are multifaceted and can vary significantly from one country to another based on economic, social, and industrial maturity. Below, we will discuss some general challenges:

- **Economic Volatility:** Economic fluctuations, especially in oil-dependent economies like Oman, can significantly affect the funding and sustainability of ICV initiatives. For instance, a sudden drop in oil prices can reduce government revenues, limiting the financial resources available to support ICV programmes through subsidies or other incentives. This volatility can undermine long-term planning and investment in local capacity building.

- **Skills Gap:** One of the primary objectives of ICV is to increase local employment; however, there is often a mismatch between the skills required by industries and those available in the local workforce. Bridging this gap necessitates substantial investment in education and training programmes. For example, in the oil and gas sector, specialized technical skills are required, which may not be readily available in the local labour market, posing a significant hurdle to effective ICV implementation.
- **Development of Local Enterprises:** Encouraging the participation of local SMEs in high-value supply chains can be challenging. Many local businesses may lack the resources, expertise, or quality standards required to compete with established international companies. This necessitates targeted support and capacity-building initiatives. For instance, providing technical assistance and financial support to help local firms meet industry standards can be resource-intensive and complex to coordinate.
- **Infrastructure Challenges:** Infrastructural inadequacies can pose substantial barriers to ICV implementation. For example, local manufacturing facilities may not yet be equipped to handle the advanced technological demands of sectors like oil and gas, leading to delays and inefficiencies. Addressing these infrastructural gaps requires comprehensive planning and substantial investment. Additionally, the lack of robust logistics and supply chain infrastructure can impede the smooth operation of local businesses, affecting their ability to deliver timely and competitive services.
- **Regulatory and Policy Uncertainty:** Frequent changes in government policies or regulatory environments can create uncertainty and disrupt the implementation of ICV programmes. For instance, sudden shifts in local content requirements or tax incentives can alter the business landscape, requiring companies to quickly adapt their strategies and operations. This can lead to increased costs and operational challenges, potentially discouraging investment in local capacity building.

While ICV programmes hold significant potential for economic development, they also come with a set of multifaceted challenges that require strategic planning and robust support systems to overcome. Effective ICV implementation involves careful balancing of economic, social, and industrial factors, and necessitates continuous engagement and collaboration between governments, industries, and local communities.

GCC countries have similarly leveraged their oil and gas wealth to promote ICV. Oman, grappling with rising unemployment, a young population, and a relatively undiversified economy, recognized the critical need to utilize oil and gas revenues and government spending to enhance localization. Addressing these unique challenges, Petroleum

Development Oman (PDO), in collaboration with the Omani government and 12 other oil and gas companies, launched an ICV Program in 2012. This initiative aimed to boost the employment of local resources (known as "Omanization"), which aims to develop local capabilities and increase the participation of local suppliers. In this section, we will highlight the ICV achievements and milestones of three Omani companies in the oil and gas sector.

CASE STUDY 5: ICV Achievements in Petroleum Development Oman

Background

In alignment with Oman's ICV Blueprint Strategy aimed at boosting the national economy, Petroleum Development Oman (PDO) has made significant strides in establishing local manufacturing facilities and enhancing the country's economic landscape.

Key Achievements:

1. Establishment of Manufacturing Facilities:
   - 67 facilities established with over US$340 million in direct investment.
   - Over US$1 billion in total business awarded to local investors and contractors.
   - Creation of more than 2,800 jobs in the manufacturing sector, directly contributing to Oman's GDP.
   - 42 Omanis sent abroad for upskilling, enhancing local expertises.
2. Collaboration and Support:
   - Partnerships with local academic institutions to foster skill development.
   - Opportunities provided to SMEs, reducing delivery lead times and lowering inventory costs.
   - Demonstrated cost-efficiency of local manufacturing, supporting operational know-how in the industrial sector.
3. Operational Milestones in 2020:
   - 9 new facilities operationalized, creating approximately 60 jobs for locals.

- Capital investment of more than US$24 million in the Sultanate.
- Supported Oman's economy and ensured security of supply for continuous oil and gas production, a major income source.

4. National Manpower Supply (Emdad) Program 2021:
   - Focused on creating job opportunities for jobseekers.
   - Several skilled programs identified to maximize employment opportunities.

Opportunities Identified by PDO:

Goods and Service Opportunities:

- In 2020, 55 goods and 20 service opportunities were identified.
- The estimated retained value is around $500 million across various areas, including project blends, 3D printing, and manufacturing of electrical and telecom towers.
- Most of these opportunities are expected to become operational within the next five years, either through direct investment or a bidding process.
- Certain opportunities will be earmarked for SMEs and Local Community Contractors (LCCs).
- Potential service opportunities encompass logistics, digitalization, maintenance, and repair services.

Impact on the Economy

PDO's initiatives have significantly contributed to Oman's economic development by:

- Establishing a robust local manufacturing sector.
- Creating substantial employment opportunities.
- Enhancing local capabilities through international training.
- Fostering collaboration with educational institutions and SMEs.
- Ensuring continuous and secure supply chains for the oil and gas industry.

Source: Department of localization of energy industry and mineral, General Directorate of Planning, Ministry of Energy & Minerals. ICV-Book-EN.pdf (omanicv.om)

Occidental Petroleum (Oxy), a multinational company, has operated in the Sultanate of Oman for over 35 years. The company values its collaboration with the Omani government and local communities. Adhering to the ICV strategy, Oxy is committed to promoting the production of Omani goods and services, enhancing Omanization rates, and supporting local businesses. From 2018 to 2023, Oxy increased its ICV contribution from 35% to 50%, establishing itself as a leader in ICV contribution in Oman (ICV Head at Occidental Oman). Occidental Oman founded the fifth Super Local Community Contractor, Al Khazain, involving 1,200 shareholders from the concession area. Oxy assisted Al Khazain in developing their business plans, management policies, procedures, and systems, and setting up a fully operational company. As of 2020, Al Khazain has earned a strong market reputation and achieved several significant milestones over the past five years.

- Occidental Oman allocated three company-owned hoists to Al Khazain Oilfield Services to help build expertise in workover rig services.
- Al Khazain operates a fleet of 100 trucks, 14 of which are owned by the company, with the remaining trucks being owned by third parties.
- The company has active contracts with over 90 SMEs.
- Al Khazain boasts a 92% Omanization rate.
- The logistics department is entirely managed and operated by qualified Omani staff.
- Al Khazain has achieved a four-year record without any lost-time injuries (LTI), has driven over 13 million kilometres, and has completed more than 34,000 deliveries.
- Al Khazain developed and delivered a customized Learning Management System (LMS) specifically designed for Occidental Oman, enabling comprehensive monitoring of all goods.

OXY In Country Value Achievements

Human Resources Recruitment

- **Around 3,400** are Occidental Oman employees, with Omanization percentage **94%**
- **Around 13,800** are Occidental Oman Contractors & Sub-contracted employees with Omanization percentage of **51%**.

Training and Qualification

- Offered 160 training opportunities
  - **80** Welding
  - **80** Electrical

  in Vocational Training Program
- **1,200** Participants from Higher Education Students, Recent Graduates and Job Seekers in Oxy Program for Entrepreneurial Development in Frontier Technology (.NXT).

Develop and Support SMEs

Occidental Oman is also supporting and promoting SMEs through our SMEs Development Program "Tasharuk". The Tasharuk Program has:

- Created more than **300** jobs, with **69%** Omanization.

1. Trained **112** personnel.
2. Grew the value of contracts for participating SMEs by **215%**.
3. Participating SMEs acquired **10** Accreditations: **9** ISO and **1** API Certification.

Purchase of Local Goods and Services

- **Delivered 50%** ICV contribution from its total third-party spend.
- Increased ICV percentage **12%** between 2017 and 2020.
- **Allocated 19**% total spend on SMEs and 9% on LCCs & SLCCs.
- **Successfully** supported and awards, **8** vendor development initiatives and **5** manufacturing opportunities between 2017and 2020.

Local Supply of Subcontracted Services

- Occidental Oman has approximately **600** subcontractors in the company's operations and blocks, and under these subcontractors, the company has helped provide around **900** job opportunities .

Technology Localization

Occidental Oman has supported a number of new localized technologies to improve the capacity and capability of Omani contractors by providing them the opportunity to participate in a variety of ICV programs, including the Vendor Development Program.

1. LAMFLOW Technology.
2. High Temperature Injection Profile Logging
3. LAMIS: Metering uncertainty calculation software

The Case of Oman India Fertilizer Co. (OMIFCO)

Oman India Fertilizer Co. (OMIFCO) is committed to the In-Country Value (ICV) Blueprint Strategy, which was introduced in late 2013 in Oman. The company has been actively contributing to the enhancement of ICV, striving to achieve the government-set objectives under the ICV programme. OMIFCO has implemented guidelines and key performance indicators (KPIs) to boost ICV in line with local regulations. The company also collabourates closely with other companies in the sector to share experiences and initiatives, maximizing their contributions. OMIFCO and its main contractors submit ICV reports quarterly, enabling the monitoring of progress, identification of new opportunities, and conducting of gap analyses (Khalid Al Farsi, Purchase and Contracts Manager, OMIFCO).

OMIFCO In Country Value Achievements

Fixed Assets Investments

> OMIFCO was established in 2003 with investments amounting to **968** US$ Million and is headquartered in the industrial city of Sur (Madayn). It also has its own pier for exporting ammonia and urea.

Employment of Human Resources

> Omanization: **79%**, OMIFCO seeks to develop local Omani human resources at various levels and specializations in the company, in accordance with the wellstudied plans and programmes.

Training and Qualification

> OMIFCO provides training courses for all the company employees, at a rate of **1000** beneficiaries annually, in various fields, including specialized technical and administrative, personal skills development, professional and leadership competency. OMIFCO has established a specialized center for talent development, which in turn, provides professional training and development programs for employees. The center also provides effective training programs for Omani students from various universities and colleges enabling them gain practical experience that will hone their professional skills and prepare them for their future jobs.

Technology Localization

OMIFCO works with advanced technologies. Despite that, the company seeks to localize any possible technologies wherever there are local capabilities and opportunities available.

Purchase of Local Goods and Services

> Purchase value of local products amounts to **10** US$ Million annually which varies from year to year as per need. OMIFCO attached great attention to increase purchases from manufactured goods in Oman as well as services provided by local institutions. This will provide new products across the supply chain and introduce new relevant technologies.

Local Supply of Subcontracted Services

> OMIFCO encourages all major contractors to support and develop local subcontractors to build up their technical capabilities and attain the highest standards.

Develop and Support SMEs

> **107** beneficiaries of SMEs Development Programs

> OMIFCO provides support to SMEs by:

1. Giving them priority while purchasing, wherever possible.
2. Stimulating the local business sector and providing support, technical and vocational development.
3. Training and financing through various programs such as “The CELL” and “Wasel” programs. More than 80 young entrepreneurs benefited through three sessions of The CELL program. On the other hand, “Wasel” program, which started in 2019, so far 27 SMEs have benefited.

Chapter Summary

Implementing effective ICV strategies is essential for organizations seeking to create sustainable value and positive socio-economic impact within the communities where they operate. By adopting a comprehensive approach that integrates supplier localization, skills development, technology transfer, community investment, and performance monitoring, businesses can foster inclusive growth, build resilient ecosystems, and strengthen stakeholder relationships.

Embracing ICV principles contributes to organizational competitiveness, reputation enhancement, and the advancement of sustainable development goals. Successful ICV implementation requires strategic alignment, collaborative partnerships, and a long-term commitment to driving positive change at the local level. By prioritizing ICV, organizations can position themselves as responsible corporate citizens and catalysts for inclusive economic development.

In conclusion, the introduction of ICV strategies within Oman and other GCC countries represents a significant step towards economic diversification and sustainable development. Through concerted efforts to enhance local workforce capabilities, maximize local sourcing, and implement comprehensive ICV frameworks, these nations are addressing pressing economic and social challenges. Norway's successful localization policies and the strategic initiatives undertaken by Omani companies like Petroleum Development Oman serve as instructive examples, highlighting the transformative potential of well-executed ICV programmes. By balancing immediate economic impacts with long-term strategic goals and fostering robust stakeholder engagement, these programmes not only contribute positively to national development objectives but also position local industries on a path toward global competitiveness and innovation. As the chapter explored, understanding the complexities, risks, and challenges of implementing ICV, alongside the pivotal role of governmental policies and regulations, is crucial for leveraging ICV for sustainable business growth and local economic advancement.

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V
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W
Workforce Pillar

Y
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Questions from Chapter 1

In-County Principle and Strategies



Multiple Choice Questions:

1. What are some objectives of ICV principles?

A. Decreasing foreign direct investment and GDP growth

B. Decreasing job creation and technology transfer

C. Supporting GDP growth, human capital development, and technology adoption

D. Reducing competitiveness of national industries and technology development

2. In which industries is ICV particularly crucial?

A. Healthcare and tourism

B. Information technology and finance

C. Oil and gas, mining, construction, and manufacturing

D. Agriculture and retail

3. What does the principle of local content development advocate for in business operations?

A. Utilizing international goods and services

B. Utilizing local goods, services, and human resources

C. Prioritizing foreign imports over local products

D. Stimulating global industries and markets

4. How does ICV address unemployment challenges and foster long-term economic empowerment?

A. By reducing investment in skill development initiatives

B. By promoting employment opportunities for international residents

C. By establishing subsidiaries in foreign countries

D. By investing in skill development initiatives and promoting employment opportunities for local residents

5. Why is technology transfer and innovation integral to ICV principles?

A. To inhibit industrial growth and innovation ecosystems

B. To foster dependency on foreign technologies

C. To catalyze industrial growth and nurture innovation ecosystems

D. To limit the dissemination of technology and knowledge

6. What is the cornerstone of ICV regarding supplier development?

A. Strengthening global supplier networks

B. Promoting exclusivity with international suppliers

C. C. Strengthening local supplier networks through capacity-building programs and partnerships

D. Encouraging dependence on foreign suppliers

7. Which of the following is NOT a strategy for enhancing ICV through supplier localization?

A. Supplier development programs

B. Import dependency

C. Local content requirements

D. Supplier diversity initiatives

8. What are the benefits of skills development programs in enhancing ICV?

A. Reducing local talent pool

B. Decreasing innovation and productivity

C. Stimulating economic growth and innovation

D. Limiting job opportunities for locals

9. How do technology transfer initiatives contribute to enhancing ICV?

A. By decreasing local capabilities and technical know-how

B. By fostering economic diversification and promoting indigenous innovation

C. By limiting access to advanced technologies and technical expertise

D. By discouraging joint ventures and collabourative research

10. What roles do governmental policies and regulations play in shaping ICV strategies?

A. They have no impact on ICV strategies

B. They create an enabling environment for businesses to prioritize local participation

C. They focus solely on promoting foreign investment

D. They hinder local businesses from participating in value chains

11. Which of the following is NOT an initiative aimed at enhancing ICV locally?

A. Maximizing local sourcing and contracting

B. Increasing nationalization programs

C. Encouraging foreign expertise reliance

D. Introducing social responsibility programs

B. Short Essay Questions:

1. How does the principle of Local Content Development contribute to the stimulation of indigenous industries and the creation of a robust supply chain ecosystem? Provide an example to illustrate its impact.
2. Explain how Job Creation and Skills Development initiatives, as advocated by ICV, address both unemployment challenges and long-term economic empowerment. Offer a scenario to demonstrate the effectiveness of such initiatives.
3. Why is Technology Transfer and Innovation considered integral to the principles of ICV? Describe how businesses can facilitate technology diffusion and foster innovative ecosystems within local communities. Provide a relevant example.
4. Discuss the significance of Supplier Development in the context of ICV. How does strengthening local supplier networks promote inclusive economic participation and enhance competitiveness? Offer a real-life scenario to support your explanation.

C. Case Studies:

Case 1: In-country value strategies in the agricultural sector

The Ministry of Agriculture, in collabouration with international development organizations and leading agribusiness firms, has conducted a comprehensive assessment of the agricultural sector in Country X to identify strategies for enhancing in-country value and promoting sustainable development. The study focuses on addressing gaps in the agricultural value chain to unlock economic opportunities and support local livelihoods. The assessment evaluates key aspects of the agricultural sector, including production, processing, distribution, and marketing, with a particular emphasis on smallholder farmers and rural communities. It identifies areas of improvement and potential interventions to enhance productivity, increase value addition, and strengthen linkages between producers and markets.

The study highlights the importance of building local capacity and promoting technology transfer to empower farmers and agribusinesses. It emphasizes the need for investments in agricultural education and training programs to develop the skills and expertise required to modernize farming practices and adopt innovative technologies.

Based on the case study provided, how can the principles and strategies

of in-country value creation be applied to enhance the agricultural sector in Country X? Provide examples of specific interventions that could be implemented to promote sustainable development, increase local value addition, and improve livelihoods for smallholder farmers and rural communities.

Case 2: Enhancing education and skills development in rural areas

In Kenya, a partnership between a multinational corporation (referred to as "Company X"), the Ministry of Education, local universities, and community organizations is implementing a comprehensive program to enhance education and skills development in rural areas. The initiative aims to address the challenges of limited access to quality education, inadequate infrastructure, and a lack of skilled workforce in rural communities.

Key features of the program include:

- Primary Education Enhancement: Company X has collabourated with the Ministry of Education and local government authorities to improve access to primary education in rural areas. This includes constructing new schools, renovating existing facilities, providing educational materials, and conducting awareness-raising activities on social and environmental issues. For example, in the village of X, a new primary school has been built, equipped with modern facilities and resources to support quality education for children in the community.
- Secondary Education Support: As part of its commitment to education, Company X has launched initiatives to support secondary education in rural areas. Through partnerships with local universities and educational institutions, the program offers scholarships, mentorship programs, and skills development workshops for high school students. For instance, in collabouration with the University of Nairobi, Company X organizes study days where selected students from rural high schools participate in educational sessions focused on relevant topics such as science, technology, engineering, and mathematics (STEM).
- Technical and Vocational Training: Recognizing the importance of technical skills in driving economic development, Company X has partnered with the Ministry of Labour and vocational training centers to improve the quality of technical education in rural areas. This includes upgrading infrastructure, providing equipment and materials, and offering training for teachers and future trainers. For example, in partnership with the Technical and Vocational Education and

Training Authority (TVETA), Company X supports the establishment of new technical training centers and the expansion of existing facilities to provide training in trades such as welding, carpentry, and automotive mechanics.

- Higher Education Opportunities: To empower young people with higher education opportunities, Company X has established scholarship programs and capacity-building initiatives. Through partnerships with local universities and international institutions, the program aims to train future leaders and professionals in fields relevant to the country's development priorities. For example, Company X sponsors talented students from rural communities to pursue undergraduate and postgraduate studies in fields such as agriculture, engineering, and business administration.
- Career Development and Mentorship: In addition to academic support, Company X provides career guidance and mentorship opportunities to students and graduates. Through networking events, internships, and job placement assistance, the program aims to facilitate the transition from education to employment for young people in rural areas. For instance, Company X organizes career fairs and skills workshops where students can interact with industry professionals and explore career options in various sectors.

Questions:

1. How does the partnership between Company X, the Ministry of Education, and local stakeholders address the challenges of limited access to quality education in rural areas?
2. What are the key initiatives implemented by Company X to enhance primary education in rural communities? Provide examples of specific activities and their impact.
3. How does Company X support secondary education in rural areas? Discuss the significance of scholarships, mentorship programs, and skills development workshops for high school students.
4. What strategies are employed to improve technical and vocational training in rural communities? Describe the role of partnerships with the Ministry of Labour and vocational training centers in enhancing technical skills development.
5. How does Company X contribute to higher education opportunities for young people in rural areas? Analyze the importance of scholarship programs and capacity-building initiatives in promoting access to higher education.

6. Discuss the significance of career development and mentorship opportunities provided by Company X for students and graduates in rural communities. How do these initiatives support the transition from education to employment?

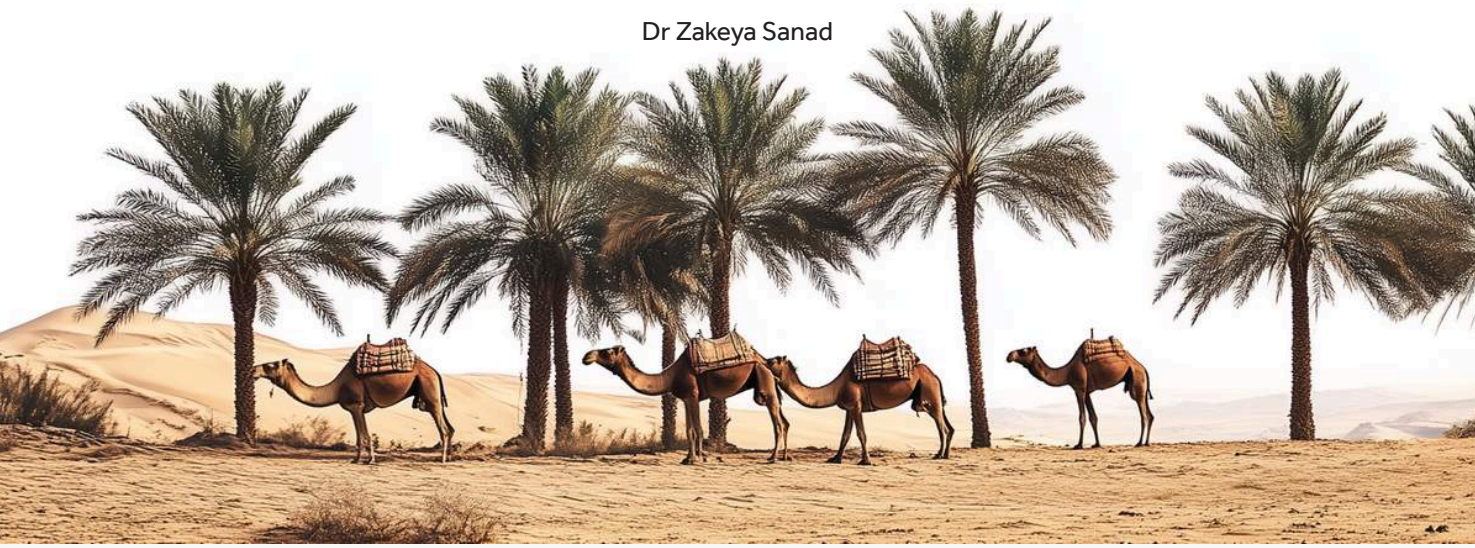
7. Evaluate the overall impact of the initiative on education and skills development in rural areas of Kenya. What are the strengths and limitations of the approach adopted by Company X and its partners?

8. How can similar partnerships and initiatives be replicated or adapted to address education and skills development challenges in other rural contexts? Discuss potential strategies for scaling up successful interventions and ensuring sustainability.

Chapter 2

In-Country Value: The Pillar of Investment

Dr Zakeya Sanad



Abstract

This chapter focuses on investment as a pillar of In-Country Value (ICV), emphasizing capital allocation decisions related to ICV. It discusses the geographical context of ICV implementation at regional and global levels, exploring its impact on national investments. The chapter begins with an introduction and a review of the resource curse and poverty paradox theories, which suggest that natural resource endowment can negatively affect economic growth. It then provides an overview of ICV and local content concepts, tracking global and regional progress. The role of capital allocation in enhancing GDP is highlighted, followed by an analysis of the significance of capital allocation in ICV initiatives. This includes economic and social outcomes such as workforce development, job creation, supply chain localization, technology transfer, research and development, entrepreneurship, SME roles, and community engagement. The chapter discusses how ICV strategies might hinder diversified local economic development, outlining some potential economic challenges from ICV implementation.

Keywords: *ICV, investment, GDP growth, economy, SMEs, Omanization*



Learning Objectives:

- To understand how the possession of natural resources can be detrimental to certain countries.
- To analyse how ICV is applied internationally and regionally.
- To evaluate the role of ICV and capital allocation in boosting a country's GDP.
- To analyse the association between capital allocation and the ICV programme in terms of the various economic and social outcomes.
- To evaluate the importance of workforce development in ICV strategies.
- To analyse the impact of local and international labour markets on ICV.

Introduction

Distributing resources to earn a return in the future is known as "investing". Buying financial assets (such as stocks or mutual funds) to profit from dividends, interest payments, or value growth is one method of investing. This term also includes acquiring real estate assets, such as buildings or land, to profit from capital gains, rentals, or both (Hodgson *et al.*, 2000).

Investing in businesses can entail establishing a brand-new company or giving money in return for stock shares or ownership. Commodity investments also include purchasing physical assets, hoping their value will rise over time. Investing and allocating capital is vital for promoting economic expansion, creating jobs, encouraging creativity and technical advancements, and raising living standards. They are, therefore, an essential part of a country's strategy for achieving economic progress. Nevertheless, the consequences of investments may vary for different reasons, such as a country's regulatory setting, institutional structure, and the global financial situation.

The impact of the ICV initiative on a country's gross domestic product (GDP) and capital allocation may differ in response to various factors, such as the scope of the initiative, the industries that are targeted, and the country's economic condition. ICV initiatives are typically introduced to promote domestic economic growth by motivating enterprises to purchase products from domestic sources. This helps boost local production and creates more job opportunities.

Natural Resources: Blessing or Curse

According to the resource curse and poverty paradox theories, countries that depend heavily on natural resources like natural gas and oil tend to have lower levels of development than countries with fewer natural resources (Hilson & Ovadia, 2020; Auty, 1994; Karl, 1997). Collier (2003) states that countries that are heavily dependent on a single or a few commodities, particularly oil, are more prone to corruption and underdevelopment. Not diversifying investments in various industries can make countries vulnerable to drops in commodity prices, leading to weak economic growth in the long run. According to Ado (2013), the perception of oil being more harmful than beneficial to countries has led stakeholders in those countries to adopt an unfavourable perspective.

To mitigate the potential negative effects of the so-called "natural resources curse", a number of developing nations reliant on natural resources adopted diverse approaches aimed at maximizing the economic advantages that their extraction sector could transfer to other sectors of their economies. A primary incentive for implementing these strategies is to mitigate the impact of unemployment and foster expansion within the economy. The "Local Content Development Policy" is a frequently implemented strategy that has

the potential to significantly contribute to the resolution of the natural resources curse. Indeed, a significant number of nations, including developed countries, adopted the local content development policy during the industrialization era. Local content pertains to the quantity or percentage of inputs, including labour, materials, and components, that originate from the domestic market and are incorporated into manufacturing processes that contribute to the prosperity of the local economy (Warner, 2011).

The development of natural resource sectors is often linked to two primary theoretical approaches: static neoclassical and dynamic approaches. The negative perception of the concentration of local resource-based industries in developing countries is attributed to the lack of skills and technology, as posited by the static neoclassical approach. Conversely, the dynamic approach places emphasis on favourable outcomes, such as technological progress, hands-on learning, and skill enhancement (e.g. Lee & Malerba, 2018).

The dynamic approach to economics posits that innovation is contingent upon the development of novel skills and challenges the prevailing assumption in neoclassical economics that innovations are solely external in nature. Hence, it is imperative for developing nations to prioritize the pursuit of enhanced opportunities and employment through innovation, rather than exclusively focusing on the maximization of income derived from established sources. The aforementioned dynamic perspectives necessitate a transition towards resource-based industrialization that prioritizes knowledge-intensive events, as opposed to exclusively depending on resource exploitation and the exportation of raw materials. This would have a positive impact on the economic growth and GDP of developing nations.

An International and Regional Overview of Local Content Policies

The adoption of local content policies has been steadily increasing over the years. Many developed and developing countries escalated their utilization of local content policies, especially after the global financial crisis. These initiatives strive to encourage the utilization of domestic resources and facilitate the growth of local industries.

Strategic localization, which involves obtaining, investing in, and developing goods, services, and labour from local sources, is becoming increasingly important for enhancing economic growth, promoting innovation, generating employment, and reinforcing self-sufficiency. To date, over 90% of countries that extract natural resources have implemented some type of local content law (Ramdoo, 2015). Australia implemented local content policies in its automobile and tobacco sectors, while Canada adopted such a policy in its automobile industry.

In general, local content policies have been implemented across various industries, such as oil and gas, agriculture, automobile, information technology, energy, and healthcare (Hufbauer *et al.*, 2013). The utilization of local content is particularly common in certain sectors internationally, such as energy and information technology (Cimino *et al.*, 2014). Local content policies are crucial for fostering mutually beneficial relationships between extractive sectors and broader economies.

Regionally, the GCC countries have gained insights from the encounters of other nations that came across comparable difficulties. To mitigate the adverse effects of the "natural resources curse", many countries have opted to implement the ICV strategy as a means to enhance their economic growth and secure a sustainable economy through the utilization of local sourcing techniques. As an example, the Oman government introduced the ICV initiative to enhance the socio-economic progress of the country by augmenting the contribution from the oil and gas sector. This initiative aims to bolster the local labour force by prioritizing the recruitment of Omani citizens and creating job prospects for them. It also seeks to leverage domestic capitalization to create value-added opportunities and optimize productivity through the procurement of goods and services from local sources.

Similarly, in 2019, Qatar Petroleum introduced the localization strategy for the energy sector (TAWTEEN), with a view to localizing Qatar's oil and gas industry supply chain and contributing substantial revenues to the nation's economy in the form of billions of Qatari riyals. The strategy sought to incentivize businesses and vendors who adhered to the TAWTEEN initiative by fulfilling the ICV criteria and goals. Furthermore, in 2015, Saudi Aramco introduced the IKTVA programme. This programme was designed to promote, assess, and oversee the additional value that an outside contractor brings to the Kingdom. Adherence to this programme is mandatory for conducting business with Saudi Aramco. The programme evaluates the utilization of local services and products, the total wages given out to Saudis, the funds allocated for the learning and advancement of Saudis, and the expenditure on domestic suppliers. Similarly, Kuwait introduced policies that mandate extracting enterprises to prioritize hiring Kuwaitis, local businesses, and local suppliers of materials, machinery, and other products. This will help Kuwait boost its financial system and improve the well-being of Kuwaiti people as it keeps developing these localization initiatives.

The United Arab Emirates (UAE) initiated the national ICV programme in 2018 to boost local businesses contributions to the economy and increase the local goods and services produced. Among the most important aspects of the programme are the establishment of targets for the national ICV programme, the provision of incentives for local buying, the promotion of technological advancement, and the development of collaborations among domestic and foreign businesses. Through the implementation of the ICV initiative, the UAE has been able to expand its economic activities through the promotion of ICV in all sectors of the economy and not only rely on oil and gas industry returns.

The implementation of these ICV initiatives highlights the commendable efforts of the GCC countries to leverage their oil and gas production for the benefit and growth of other key sectors in their economies. The creation of greater economic diversity serves to alleviate the risks linked to excessive dependence on one sector or industry, which could make the regional economy susceptible to volatility and disruptions within that particular sector. Hence, the main driving force for ICV initiatives in the GCC countries was the desire to strengthen their economic stability and decrease their reliance on unpredictable oil and gas markets.

As evidenced in countries like Norway, local content policy must be supported by a well-defined, precise, and transparent legislative system, which includes a strong performance-monitoring framework. However, an important deficiency in the GCC region is the lack of well-defined, inclusive, and detailed laws regarding local content schemes. Local content guidelines in the region are primarily outlined in policies, industry regulations, and petroleum agreements based on individual circumstances. Typically, these guidelines in the petroleum and natural gas industries do not address the broader issue of evaluating the complete effect of local content requirements on long-term achievement in other crucial industries of the economy as a whole. For example, specific guidelines fail to sufficiently address the interplay between local content regulations and other sectors such as investment, trade, aviation, and infrastructure. Consequently, the absence of a comprehensive legislative framework has hindered the development of efficient strategies to address significant policy challenges, such as aligning the objectives of local content policies with the objectives of sustainable development in the interconnected industries of the local economy.

ICV and the Role of Capital Allocation in Boosting a Country's GDP

The national income refers to the aggregate value of all end products and services generated by a country's economy within a specific time frame, typically one year. GDP and GNP (gross national product) are the most frequently used measures of a country's economic growth. GDP is a widely used macroeconomic measure that quantifies the total value of the products and services produced in a nation. A growing economy means that the current GDP surpasses a previous level of GDP, which means that the overall production level in a country exceeds the level of previous years. GNP, on the other hand, measures the total value of commodities and services produced by a nation's population, including those produced by citizens who are abroad. However, this measure excludes foreign companies' products and services functioning within the country (Argandona, 2016).

Endogenous growth theory (Lucas, 1988) highlights the importance of human and physical investments for sustaining a long-term economic development. In general,

investments can play a crucial role in advancing the overall economy. Investments impact the aggregate expenditure because an increase in investment activities is likely to result in improving the aggregate demand, thereby boosting the country's income and reducing unemployment rates. Additionally, investments contribute to increasing the production capacity as well as improvements in technological techniques.

Investment types include public, private, and foreign direct investments (FDI), and all of these types have a substantial influence on expanding and developing a country's economy. For instance, FDI represents the extent of foreign ownership of local productive assets, including manufacturing plants and land. FDI also includes intangible assets such as goodwill, innovations, intellectual capital, and skills.

With the increasing number of countries that are applying ICV initiatives and local contents, it is essential to ask why the concept of ICV and investments has a significant influence on a nation's GDP? ICV can be explained as the added value to a country's economy due to local operations and expenditure. Therefore, allocating capital to achieve the ICV objectives would result in many positive economic consequences. For example, it would increase the local production level because it motivates businesses to procure services and products using domestic sources. Furthermore, allocating capital in domestic assets, such as equipment, digital advancement, innovation, machinery, and facilities, would improve the economic system's capacity by generating more commodities and services. Increasing the production level could lead to a GDP level enhancement.

Moreover, it is anticipated that domestic enterprises will create additional job opportunities in order to meet the objectives of the ICV programme. The increase in employment opportunities leads to higher household incomes and heightened consumer expenditure, thus playing a substantial role to the growth of GDP. Furthermore, ICV programme often require companies to allocate funds towards the construction of local infrastructure to accomplish the programme's objectives, leading to improvements in transport, communications, and other vital amenities. These advancements have the potential to enhance productivity and ultimately result in a rise in a country's GDP.

One of the ICV programme's primary objectives is to promote the allocation of financial resources towards educational opportunities, training, and medical services, as these sectors play a crucial role in enhancing human capital. Allocating resources towards enhancing human capital improves the skills and competencies of the domestic labour force, leading to increased productivity and a more robust overall economy. Furthermore, allocating capital toward the requirements of the ICV programme might result in a reduction in the country's imports by encouraging the utilization of domestic resources. This has the potential to positively impact the nation's trade balance by reducing reliance on imports and preserving foreign exchange reserves.

Moreover, to meet the requirements of an ICV initiative, businesses may be required to allocate resources towards cutting-edge technologies, which play a vital role in ensuring continuous growth in GDP. Nevertheless, the process of making capital allocation decisions requires the development of metrics and reporting techniques to evaluate the impact of investments on ICV and ultimately the GDP of a nation. The implementation of transparent measurements and criteria would facilitate the assessment of the effectiveness of capital allocation strategies in meeting the criteria of ICV.

Capital Allocation Decisions and ICV

When evaluating the investment pillar in the ICV programme, it is essential to have a closer look at the allocation of capital to determine both the economic and social consequences. The following sections discuss in depth the potential influence of ICV on the allocation of capital.

Local Workforce Development

Having a foreign workforce promotes an international perspective by enriching the cultural diversity within the work environment. The presence of this variety has the potential to result in a more inclusive and creative workplace, which will benefit the overall success of ICV initiatives.

Nevertheless, relying excessively on global labour markets can result in dependence on foreign skills, which could marginalize local workers and impede the growth of local knowledge. The unemployment rate in many developing countries rises steadily due to growing populations and urbanization. The prevalence of unemployment and low economic prospects, particularly among young people, can give rise to a volatile social issue in numerous developing nations. This is particularly concerning as many individuals who have completed their education still need to work for an extended period after graduating (Hove *et al.*, 2013). Therefore, unemployment is a significant macroeconomic issue that all nations face. The economic and social implications of every economic system underscore the need for policymakers to implement strategies to increase the employment rate. The extraction of oil and its associated operations are directly creating a significant number of job opportunities.

According to a study in the United States by the International Monetary Fund (IMF), the oil and gas sector significantly increases employment opportunities in several states. Such states have produced more jobs than the other country (Era Dabla-Norris *et al.*, 2015). Through a multiplier effect, the extraction of oil techniques has improved the general well-being of the local workforce while also producing well-compensated employment opportunities.

To overcome the unemployment issue, investing capital in expanding or establishing local businesses within a country is essential, as it would directly contribute to creating jobs. This entails allocating financial resources to hire, compensate, and provide benefits to domestic employees, thereby improving the overall economic welfare of the community. One way to create employment is by implementing specific criteria, such as setting minimum quantitative standards for hiring local individuals or developing local skills and capabilities.

One of ICV's primary objectives is the provision of local job opportunities and the creation of highly skilled citizens. The objective of mandating the hiring of citizens is to generate employment opportunities for the domestic workforce, thereby fostering countries' income growth and enhancing the skill set of nationals. Countries must ensure that their local capabilities possess the necessary expertise and tools before redirecting essential expenditures back to their countries. Furthermore, when a global organization opens branches in a country, it introduces new technologies, innovative machinery, specialized capabilities, and industry knowledge to the domestic workforce. This dissemination of technology and expertise creates opportunities for career development. Local employees can acquire specialized knowledge and skills, thus enhancing their chances of securing more advanced positions in the local marketplace.

The ICV programme promotes investing capital in education and training programmes to improve the skills and expertise of the local labour force and foster a knowledge economy. This programme includes funding initiatives that seek to impart information, build skills, and ensure that the labour force is suitable for regional sector positions. Fostering a highly trained and competitive workforce is crucial for the nation's long-term economic growth and value creation, and it will only be possible with this strategic investment. Moreover, increasing employment opportunities in the area could result in more community support. Increasing the number of employed citizens can enhance company-community relations, thereby helping foreign investors to acquire the necessary social licence for business operations.

The government typically implements public interventions[1] through either a carrot approach, which involves providing incentives, or a stick approach, which involves regulatory measures that are usually mandatory. The regulatory approach frequently involves setting specific quantitative targets, such as a value, or imposing qualitative requirements, such as disclosing or providing justification for employing foreign labour or purchasing foreign supplies.

1. ICV policies can be categorized into three types of intervention to lower the unemployment rate of local workers, namely public sector intervention, private sector intervention, and collaboration with local communities (Ramdoo, 2015).

The implementation of ICV has the potential to generate significant employment prospects within the private sector. As local private businesses grow and enhance their activities, they naturally require an additional workforce to handle the increased volume of production, distribution, marketing, and other essential business operations. As a result, new job positions are created, ranging from positions requiring minimal experience to those requiring advanced skills. Nevertheless, the repercussions extend beyond the confines of the business itself. This business expansion has a cascading impact that creates fresh job prospects across the entire value chain, including manufacturing, transportation, logistics, raw material procurement, and associated services.

CASE STUDY 1: Workforce Development in Norway

Norway serves as a compelling illustration of the profound influence that workforce development exerts on the domestic economy. Norway's GDP per capita was comparatively lower than that of its neighboring countries, Denmark and Sweden, until the 1970s. Nevertheless, following the initiation of oil production, Norway emerged as a frontrunner, surpassing numerous nations. Norway has achieved success through its localization strategies, which prioritize the transfer of skills and the enhancement of local expertise.

Norway mandated that international oil companies must enter into training agreements and offer comprehensive training, encompassing both practical and theoretical aspects, to their domestic workforce. This also entails requiring a certain percentage of employees to be Norwegian. Consequently, a multitude of Norwegian professional services firms have expanded their operations to provide petroleum and natural gas products and services on a global scale. Norway's commitment to adopting state-of-the-art technology and facilitating the exchange of knowledge has facilitated its emergence as a prominent global frontrunner in the oil and gas sector.

Source: https://core.ac.uk/download/pdf/249952367.pdf

Hence, if ICV is successfully implemented, more jobs will be offered in the market, creating a competitive local workforce. The growth of South Korea's shipbuilding industry is attributed to highly skilled local workers relying on their local content policies. This approach has empowered Korean shipbuilders to gain a competitive advantage in the international market. Indonesia has achieved noteworthy results in local job creation and skill advancement. Indonesians dominate at least 95% of employment positions in the oil and gas industry, and significant efforts are being made to enhance their expertise and abilities (Tordo & Anouti, 2013). Similarly, Malaysia exhibits positive outcomes regarding domestic employment and skills enhancement.

ICV's encouragement of direct employment generation is a crucial component that nations with abundant natural resources increasingly embrace. Eight nations in sub-Saharan Africa were the subject of exploration by the African Center for Economic Transformation (ACET). The research indicates that neighbourhood content principles and guidelines lay out business targets and amounts, convincing companies to comply with governmental policy regarding minorities in society approaches. Both Ghana and Nigeria have enacted specific legislation to address this matter. Ethiopia, Mozambique, and Namibia have different policies and regulations that require mining companies to provide employment and educational programmes for local citizens as part of their applications for mining licences. Also, Nigeria demonstrates the positive influence of local content on the development of human capital.

Furthermore, according to the report by Herrera *et al.* (2016), Latin America, Brazil, and Mexico have implemented more precise local content regulations in their national legislation and policies than other countries in the region. Mexico, Venezuela, and Brazil have the largest workforces in this industry based on the size of their oil and gas sectors. In addition, it is essential to point out that over 90% of local people work in the oil and gas sector. Moreover, Colombia and Brazil are more committed to enhancing skills by allocating substantial resources to human capital development and investing over USD1,500 per employee annually.

One study evaluated the job creation in Brazil's wind power sector between 2010 and 2017 and estimated that it generated approximately 170,000 person-year equivalents (Simas & Paca, 2014). The study discovered that contrary to previous research, the construction industry, rather than the manufacturing sector, is the most labour-intensive and has the most extraordinary capacity for job creation. According to research by the Brazilian Wind Energy Association, producing 1 megawatt of wind energy creates 15 jobs. Since 2009, this has created 12,000 direct and indirect jobs, as Rennkamp and Fortes Westin (2013) noted.

Venezuela has implemented a general labour law that promotes the employment of citizens and establishes minimum requirements for Venezuelan workers. Failure to meet these requirements results in fines. In Colombia, local employment growth is facilitated by implementing local content laws that incentivize the prioritization of domestic workers. Provisions for skills development incentivize businesses to create training programmes and contribute to the National Innovation Fund. Given the national priority of skills development, Colombian gas and oil sector contracts incorporate more precise measures about this issue. Moreover, Ghana has demanded that international companies develop strategies and schemes for educating and training its citizens throughout their contracts.

Governments in the MENA region use ICV as policy instruments to maximize the extent of local benefits derived from the extractive sector, including local job creation, skill enhancement, and the involvement of national industries. Oman, for example, recognized the significance of leveraging oil and gas revenues and government spending to boost localization in response to rising unemployment and a relatively undiversified economy.

To accomplish this, PDO, in conjunction with other entities in the oil and gas field, initiated training initiatives for workers with varying levels of expertise and established incubators to foster the growth of local contractors. The training programmes allowed Omani individuals to acquire certificates in vocational areas, such as welding. In addition, highly skilled employees, such as engineers and white-collar workers, were provided with accredited courses. By boosting local contractors' involvement in the oil and gas supply chain and creating over 14,000 new jobs for the economy, Oman's ICV initiative succeeded.

Additionally, the introduction of ICV in Oman has encouraged several companies to actively contribute to long-term socio-economic growth and reduce unemployment among Omani citizens. For example, Saipem, a globally renowned company in engineering and drilling, has created a model that adheres to the ICV standards and goals set by both their clients and the Omani government. The Saipem programme seeks to enhance the capabilities of local small and medium-sized enterprises (SMEs) by focusing on Omani recruitment, educational initiatives, scholarships, the improvement of skills, and the use of locally sourced subcontracted goods and services labelled "Made in Oman". The project promotes job growth in Duqm, surpassing the agreed-upon goals for employing Omani nationals (37% in 2020) and fostering their motivation and skill development.

Supply Chain Localization

Another important aspect of capital allocation is the support of supply chain localization. It is crucial to invest capital in developing local procurement practices and supply chains, as these investments would bolster the expansion of the national economy, generate employment opportunities, and augment ICV by procuring goods and services from local suppliers. In addition, allocating capital directly impacts the level of engagement a company has with local suppliers. Allocating resources to local suppliers not only assists small enterprises but also contributes to establishing a robust and environmentally friendly network of suppliers.

The growth of local supply chains would contribute to having a positive impact on a country's economy. Consequently, the supporting industries would undergo expansion, generating a cumulative effect on the economy. Understanding the capabilities of regional supply chains is crucial for advancing local expertise and fostering the exchange of technological knowledge.

Various countries, including the UAE, are expanding the scope of the ICV programme by incorporating additional sectors like aviation. This step is being taken as part of their national industrial plan to increase economic growth and the efficiency and competitiveness of the industrial sector. One notable example is Etihad Airways, which was the first carrier in the United Arab Emirates to take part in the ICV programme. Etihad Airways participates in this programme to provide a preference to UAE-based local suppliers and businesses during procurement. Additionally, it incentivizes international suppliers to establish local offices in the UAE, attracting more foreign investments to the region.

Furthermore, the infant industry argument posits that local content policies facilitate the development of emerging sectors by providing them with initial protection, subsidies, and other forms of government support, enabling them to compete globally. The concept is that the ability to produce goods and services more efficiently improves over time, and local producers benefit from being protected from stronger rivals by trade barriers. Therefore, domestic producers can achieve economies of scale at a faster rate, leading to a reduction in unit costs and ultimately making them more competitive and cost-efficient. Increased market size and more excellent production expertise have led to accelerated productivity and investment opportunities.

In the past decade, Malaysia's petroleum sector has become increasingly export-oriented due to its local content initiatives, which have implemented targeted local industrial policies that have enabled domestic suppliers to gain skills and production experience through practical experience. Consequently, Malaysia has created a significant supply industry that competes for global projects. Brazil implemented a similar policy in the wind energy sector, but its impact on the economy still needs to be increased due to capacity constraints. Quebec's local content policy regarding turbines significantly affected multiple industries within the developing economies worldwide.

Technology Transformation

Transferring technology or intellectual property to local businesses or government entities is becoming necessary. Some countries require investors to utilize the most advanced technology accessible and mining companies to cooperate with local organizations and specialists. Local companies can acquire and incorporate sophisticated technologies by investing capital in technological transfer efforts. This step enhances efficiency and strategically positions local businesses to compete globally.

Innovation is stimulated by investing in technology transfer programmes that carry out research and development within a nation. This contributes to the development of local capacities, promotes technological progress, and enhances the competitiveness of industries, thereby positively impacting the ICV initiatives. Furthermore, a significant

advantage lies in transferring the latest technologies to local businesses. The idea of technology transfer is to leverage the advantages of technology and knowledge transfer because enterprises must transfer technology to maintain the high quality of their products by utilizing local resources. The transfer of technology through ICV leads to acquiring knowledge through practical experience and developing capabilities in the local supply chain. In addition, ICV's goals aim to make up for the harmful social and economic effects of investments in local communities, especially in the mining, oil, and gas industries, where people often lose their jobs and cannot make money for a while or for good.

The mining industry, for instance, is experiencing rapid advancements in technology globally, impacting various aspects of the industry, including surveying, research, manufacturing, processing, and data mining. What factors are fuelling the rapid integration of technology in the mining industry? Initially, the depletion of reserves necessitates the exploration of more profound depths. Increased depth entails more rigorous data analysis and higher safety requirements. Additionally, the need for digitalization and improved operational effectiveness is evident due to rising labour costs, labour union influences, and the overall impact of rising costs (resulting from the decline of easily accessible assets).

This could result in environmental benefits by enabling the pursuit of environmental goals within a resource-constrained context and facilitating the creation of environmentally friendly employment opportunities. Moreover, indigenous content can facilitate the entry of experienced participants into the international market, leading to enhanced competition and innovation and reduced expenses associated with green technology. Also, due to the market power issue, which stems from the unequal market power between foreign and local suppliers, local content policies could ensure that domestic companies attain equivalent purchasing power as foreign suppliers without creating excessive advantages for the local industry.

Investment in technology can stimulate growth in the economy through the creation of new job opportunities. Although technology can potentially displace specific jobs, it offers unexpected opportunities for local workforce growth. Technological capital allocations frequently result in the creation of unique businesses and the growth of current ones, thereby creating employment opportunities in areas including programming, the analysis of data, and data mining. In addition, ICV initiatives have the potential to build a market for locally based technology companies through the imposition of a specific proportion of goods or services that must be procured from local sources. This has the potential to foster funding for domestic technology companies and promote the growth of local technology capacities. This approach would help firms compete with international companies and boost local economic growth.

In advanced mining economies, there is frequently a deliberate desire to cultivate proficiency in new high-tech projects. Countries enforce the transfer of technology, research and development, and local content standards to guarantee that local businesses enhance their capabilities to stay ahead in innovation. For instance, Chile has prioritized assisting local small and medium-sized enterprises in creating creative solutions for technological challenges encountered by copper mining companies. The objective is cultivating a specialized market segment, establishing a superior position over competitors, and offering customized solutions. These solutions can then be exported as premium services to global companies encountering comparable challenges.

Research and Development

Domestic investments in research and development activities promote innovation. Allocating capital to research and development can generate innovative services, goods, and intellectual property, thereby ensuring the competitiveness of the local industry and contributing to the growth of the country's economy. ICV policies encourage businesses to invest in research and development projects by fostering the expansion of domestic businesses and industries. This motivates businesses to enhance their goods, operations, and services, enabling them to remain ahead of innovation.

Excellent investment in research and development fosters advancements in technology and enhances the overall growth of the nation's innovation ecosystems. Norway was among the first countries to dedicate resources to enhancing the value within the domestic supply chain through research and development activities. The country capitalized on foreign resource investment by enacting policies to enhance its ICV. This included requiring international oil companies to form research and development partnerships with the Norwegian government and research institutes.

According to Olawuyi (2019), the regulations of oil and gas companies in the MENA region mandate conducting research and development activities to assist local businesses in enhancing their competitiveness by gaining access to cutting-edge technology. Additionally, MENA oil and gas companies must prefer locally produced supplies, machinery, and equipment if they can match better international choices in terms of price, quality, and delivery time. Furthermore, in 2021, the United Arab Emirates created history by being the first Arab nation and the fifth country worldwide to land on Mars successfully. It is the second country to enter Mars' orbit at its first attempt. This accomplishment reflects exceptional technological and scientific skills, pushing the limits of human understanding and innovation. The UAE's competitiveness in the world economy has increased due to the change in its global image, which has also effectively encouraged foreign investment.

CASE STUDY 1: Workforce Development in Norway

Norway serves as a compelling illustration of the profound influence that workforce development exerts on the domestic economy. Norway's GDP per capita was comparatively lower than that of its neighboring countries, Denmark and Sweden, until the 1970s. Nevertheless, following the initiation of oil production, Norway emerged as a frontrunner, surpassing numerous nations. Norway has achieved success through its localization strategies, which prioritize the transfer of skills and the enhancement of local expertise.

Norway mandated that international oil companies must enter into training agreements and offer comprehensive training, encompassing both practical and theoretical aspects, to their domestic workforce. This also entails requiring a certain percentage of employees to be Norwegian. Consequently, a multitude of Norwegian professional services firms have expanded their operations to provide petroleum and natural gas products and services on a global scale. Norway's commitment to adopting state-of-the-art technology and facilitating the exchange of knowledge has facilitated its emergence as a prominent global frontrunner in the oil and gas sector.

Source: https://core.ac.uk/download/pdf/249952367.pdf

Entrepreneurship

Investment in entrepreneurship is essential for promoting social progress and economic growth. It fosters competition and innovation, leading to new products, services, and enterprises. The country would unleash local creative capacity and create job prospects by supporting entrepreneurs who want to pursue their entrepreneurial aspirations. By putting into practice sustainable business strategies or coming up with creative solutions to urgent concerns, entrepreneurs frequently recognize and solve societal difficulties.

Entrepreneurship fosters a dynamic economic environment, promoting job creation, augmenting economic expansion, and inspiring people to take risks and pursue their entrepreneurial goals. Additionally, entrepreneurs spot holes in the market and fill them with innovative goods that boost local economic growth, create new demand, and may even revolutionize established industries, resulting in increased competition and efficiency. Furthermore, entrepreneurship is essential for increasing a nation's GDP and tax income. In addition, entrepreneurs consistently improve their products and services to increase productivity and maintain a competitive advantage in the

marketplace. Additionally, successful entrepreneurship attracts foreign investors. The increase in foreign capital stimulates the domestic economy, generates employment opportunities, and promotes innovation.

Shezawi *et al*. (2018) conducted a thorough investigation of the role that the ICV scheme in Oman plays in promoting entrepreneurship opportunities and, consequently, growth for economic development. Adopting an exploratory method, the study conducted a secondary data analysis of seven Omani firms investigated through four ICV lenses (Investment, Workforces, Goods, and Services). It is evident from the results that ICV initiatives have made considerable strides toward influencing Oman's economy quite remarkably through human capability refinement and SME realization. The focus is on implementing the ICV strategy, which has opened up new opportunities for local entrepreneurs through self-employment and entrepreneurship promotion in the community.

Nevertheless, it also reveals a lack of consistency in the execution methods these firms are developing, underscoring the need for more precise guidelines and regular reporting to increase support from emerging entrepreneurs. The study results are crucial in defining the future directions of ICV implementation, highlighting the fact that entrepreneurship plays a vital role within Oman's economic structure. A recent study by Al-Alawi and Matriano (2021) described Haya Water's strategic management processes, highlighting innovation and entrepreneurship as critical elements of ICV progression. Their results correspond to the national ICV strategy, demonstrating knowledge of managerial actions towards socio-economic growth.

Moreover, Pauceanu (2016) describes the determinants of entrepreneurship and innovation in Oman, a country characterized by its dynamic economic development in many fields. Its hallmark is that it provides an exciting context for entrepreneurship, primarily because of the country's stabilized government system, whose tax regime is low. This environment makes Oman an investable state for both domestic and foreign investors. The study considers Oman's role in diversifying an economy based on oil and gas through active participation in fishing, light manufacturing, and agriculture.

This diversification is centralized through progress in technology and innovation. Pauceanu's (2016) work refers to the aspects that determine personal choice interactions between entrepreneurship and innovativeness. The findings are representative of the discourse on entrepreneurship initiatives and innovation processes in a diverse economy such as Oman's, reflecting how Oman runs its strategic policies aimed at creating conditions conducive to business growth. This study highlights some key observations regarding entrepreneurship and innovation within Oman's growing economic landscape.

In addition, Pauceanu (2016) offers a broader viewpoint on Oman's economic diversification; innovation and entrepreneurship in this stable low-tax setting are of enormous importance. The research ties these factors to Oman's broad economic development plan, highlighting their relevance in a diversified economy. Collectively, these findings constitute a general overview of the need to strengthen Oman's ICV after activating strategic capital allocation processes favouring different sectors and focusing on innovation and entrepreneurship, including, but not limited to, education.

CASE STUDY 3: Effectiveness of ICV Requirements in Promoting Solar PV Investment in India

The India's National Solar Mission (NSM) aims to boost local solar PV manufacturing through LCRs/ICV, which mandated the use of locally manufactured crystalline silicon modules and cells for solar projects. Despite this, the LCRs/ICV requirement led to a significant preference for foreign thin-film PV technology, primarily due to its cost-effectiveness and favourable financing from the US Export-Import Bank. Several factors contributed to the limited success of such LCRs initiatives: policy design flaws, market instability, lack of supportive mechanisms, and insufficient innovation potential in the local industry. While LCRs were intended to protect and grow the domestic solar manufacturing sector, they inadvertently encouraged the use of cheaper foreign technologies, undermining the development of local capabilities. Additionally, inconsistent and conflicting policy incentives further complicated the situation for local manufacturers.

Johnson (2013) argues that to have a very effective LCRs/ICV, the ICV requirement must be well-designed, aligned with broader policy measures, and supported by mechanisms that foster long-term innovation and competitiveness in the local industry. Regular evaluation and adaptation of LCR policies are crucial to ensure they achieve their intended economic and developmental goals.

Source: Johnson, O. 2013. Exploring the Effectiveness of Local Content Requirements in Promoting Solar PV Manufacturing in India. German Development Institute. Discussion Paper < https://www.idos-research.de/uploads/media/DP_11.2013.pdf>

Small and Medium-Sized Enterprises (SMEs)

Entrepreneurs are vital to any nation as they continuously seek new business opportunities, while SME enterprises are key drivers of the nation's economic growth. Several nations assert that SMEs significantly contribute to creating employment and revenue generation within their borders. SMEs are engaged in different areas and industries, like manufacturing, services, transportation, imports and exports, creation, and renting. Christina *et al.* (2014) indicate that SMEs are fundamental for a country's endeavours to battle neediness and create occupations.

SMEs are crucial for boosting a country's income as they act as powerful drivers. All nations focus on expanding the scope of SMEs to achieve sustainable national development and economic expansion. This is why many countries are investigating the challenges and limitations that hinder the expansion of SMEs. Oman prioritizes and values the role of SMEs in local economic growth. For instance, it is assumed that most SMEs experience delays in their formation and production commencement, primarily due to financial constraints. Also, the challenges SMEs encounter include the need for a supportive system of governance and limited financing options. Furthermore, SMEs could face challenges in sourcing capital to start a new business or expand their current one.

To promote economic growth and sustainable development, the Omani government, for example, implemented the ICV Initiatives, which aim to prioritize local goods and services and stimulate investment in value-added alternatives (Shezawi *et al.*, 2018). Following these stages, Oman has implemented many initiatives since 2012 to support SMEs and motivate them to address the nation's unemployment issue. SMEs have expanded into various industries both inside the country and internationally. In an interesting analysis of the ICV scheme's effect on entrepreneurship, Shezawi *et al.* (2018) demonstrate that the initiative creates new business opportunities and contributes to national economic growth. Their research points out the necessity of providing clear guidelines and support for SMEs with opportunities concerning ICV initiatives.

These SMEs are developing unique entrepreneurial ideas that are contributing to Oman's domestic economy. The oil and gas sectors are no exception to this. ICV opportunities are highly beneficial for local businesses. The main goal of the ICV effort is to bring together all domestic businesses and SMEs on one platform. In 2019, Qatar Petroleum introduced the TAWTEEN programme to localize the country's natural gas and oil supply chain and create opportunities for expansion for domestic SMEs.

Community Engagement and Social Impact

Capital allocation decisions may involve investments in community and social projects. Investing in social responsibility initiatives, such as building educational institutions and medical centres, positively impacts the domestic community by improving their

welfare. Consequently, it helps promote a more comprehensive and sustainable ICV. Socially beneficial initiatives that prioritize learning and skills enhancement have the potential to empower people in the community by granting them accessibility to further favourable employment prospects and enhancing their capacity to contribute to the country's economy. Through financial investments in educational projects and skill-building initiatives, local enterprises could contribute to the development of the domestic labour force, thereby achieving the ICV goals.

Active participation in local communities can foster economic growth through the generation of new jobs, support for domestic enterprises, and a contribution to the expansion of the domestic economy. This could be accomplished by making investments in domestic infrastructure assignments, purchasing domestic supplies, and recruiting domestic workers.

Al-Hinai *et al.* (2023) explored how sector-specific characteristics, particularly infrastructure development, enhance Oman's economic and social value. The study helps in understanding the dynamics of strategic capital allocation to all infrastructure sectors' operation differences and their respective socio-economic impacts using a hermeneutical perspective; the study focuses on the subjective interpretation of social value, featuring different perceptions in non-Western countries such as Oman. Based on semi-structured interviews with governmental decision-makers, the study defines some 14 products and 11 results in developing a social value model under different sectors such as water, ICT, energy, waste, and transport. It shows that each subsector contributes uniquely to social value, with the energy sector being reported as the top contributor. The study findings highlight the important role of community engagement and social impact in achieving ICV objectives.

The Negative Economic Consequences of Applying ICV

ICV strategies could boost local value creation, which in turn would positively impact the national economy as well as empowering its workforce. However, poorly executed strategies lacking defined safeguards could end up having adverse effects. ICV strategies may reduce a nation's oil and gas sector's worldwide competitiveness if they are misused or misaligned, as they aim to deter imports and limit competition among local and international resources, potentially undermining the sustainable development goals of ICV plans. Also, a lack of access to advanced technology, machinery, raw materials, and skills domestically can hinder a country's competitiveness in the worldwide marketplace. ICV strategies could hinder local diversification of the economy by limiting input accessibility and output across countries. Countries that have developed ICV guidelines rely on government support and tend to oppose the removal of such support.

The implementation of ICV may negatively affect worldwide trade by potentially placing imports at a disadvantage and limiting competition among local businesses and foreign rivals. With regard to employment, initially implementing ICV can boost the creation of jobs in a particular sector but may reduce returns due to increased input costs, which leads to lower output and decreased employment. Implementing ICV strategies may lead to economic drawbacks in terms of both innovation and quality as they may act as obstacles to creativity due to restricted access to technologically advanced resources. If these strategies are considered ambiguous, it could lead to manipulation and corruption.

There has been criticism regarding the absence of clear ICV requirements, with countries applying ICV strategies uniformly without considering sector disparities or developing tailored strategies that align with the country's particular economic features. In addition, ICVs enforced in countries that have limited manufacturing capacity or inadequate technological resources can threaten the global competitiveness of an industry by potentially increasing the retail cost of locally manufactured supplies. This is because local businesses are unable to provide high-quality products and services promptly.

Moreover, ICV initiatives in the mining industry could create ripple effects on other industries due to links among the various industries. Well-constructed and effective ICVs can add value to an economy, while inefficient and defective ICVs can diminish value throughout the value chain. Impeding a section of the value chain due to cost inefficiency or shortages of supplies would result in increased costs, affecting not only the mining industry but also other industries. Lower profits in industries would significantly affect fiscal revenues.

Finally, excessive adherence to ICV requirements could lead to supply chain vulnerabilities and impact the long-term viability of businesses in nations reliant on natural resources. For instance, the EU, Japan, and the United States have been actively engaging in economic diplomacy to oppose any actions that could impact the accessibility of materials that they consider essential for their manufacturing sectors and the sustainable operation of their economies. Hence, ICV strategies must be customized meticulously to prevent adverse effects on the nation's economy.

Chapter Summary

Chapter 2 explores investment as a key aspect of ICV, focusing on how capital allocation impacts economic growth and development. It begins with theories suggesting that natural resource wealth can impede growth and then outlines the ICV concept, highlighting its progress globally and regionally, particularly in the GCC. The chapter emphasizes the importance of capital allocation in boosting GDP through workforce development, job creation, supply chain localization, technology transfer, research and development, and entrepreneurship. Examples from Norway, South Korea, India, GCC countries, and others illustrate successful ICV strategies that enhance local economies. It also discusses the role of SMEs and community engagement in driving economic growth. However, it warns of potential negative consequences, such as reduced global competitiveness and economic diversification, from poorly implemented ICV strategies. The chapter calls for clear, transparent guidelines tailored to specific sectors to optimize positive outcomes.

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Keywords Index:

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Angola
Australia

B
Brazil
C
Capital Allocation
Canada
Colombia
Community Engagement

D
Denmark
Diversification
Dynamic Approaches

E
Economic Diversification
Education and Training
Endogenous Growth Theory
Entrepreneurship
Ethiopia

F
FDI (Foreign Direct Investment)

G
GDP (Gross Domestic Product)
Ghana
GNP (Gross National Product)

H
Human Capital
Human Development

I
Indonesia
Infrastructure Development
Innovation
International Monetary Fund (IMF)

K
Kuwait

L
Labour Market
Latin America
Local Content
Local Workforce Development

M
Malaysia
Mexico
MENA Region
Mozambique

N
Natural Resources Curse
Norway
Nigeria

O
Oman
Omanisation

P
PDO (Petroleum Development Oman)
Private Sector
Public Sector

Q
Qatar
Quebec

R
Regulatory Measures
Research and Development

S
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Skill Development
Small and Medium-Sized Enterprises (SMEs)
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Sustainable Development

T
Technology Transformation
TAWTEEN (Qatar)
Training

U
Unemployment
United Arab Emirates (UAE)
United States

V
Venezuela

Z
Zero-Sum Games

Questions from Chapter 2

ICV Pillars: Investment



A. Multiple choice questions:

1. What theory posits that nations with a significant dependence on natural resources such as gas and oil tend to exhibit lower levels of development in comparison to those with a lesser abundance of natural resources?

A. The stakeholders' theory

B. The resource curse theory

C. The resource dependency theory

D. The resource-based theory

2. The ICV strategy could contribute to preventing the natural resource curse by:

A. Boosting foreign investment in extraction of resources activities.

B. Increasing the international workforce in the country.

C. Facilitating the exportation of raw materials to global markets.

D. Promoting the localization of resource-derived goods processing and production.

3. The ICV policies are categorized into three types of interventions to lower the unemployment rate of local workers, which include all of the following with the exception of:

A. Private-sector intervention

B. Organization for Economic Co-operation and Development intervention

C. Public-sector intervention

D. Collabouration with local communities

4. Is a theoretical approach that perceives the concentration of local resource-based industries in developing countries as unfavorable due to a lack of skills and technology:

A. Neoclassical approach

B. Scarcity approach

C. Dynamic approach

D. Agency cost approach

5. Which of the following theories suggests that investment in human and physical capital plays an essential part in boosting long-term economic growth:

A. Neoclassical economics theory

B. Cluster theory

C. Endogenous growth theory

D. Dynamic approach theory

6. How does allocating capital help improve the ICV program?

A. It contributes to decreasing the reliance on local products and services.

B. It makes domestic market knowledge less important.

C. It makes international market events more pressing.

D. It facilitates the effective use of local resources in a chosen country.

7. What are the implications of implementing an ICV program for a country's long-term economic stability?

A. It does not have a substantial impact on a country's economic stability.

B. It leads to a higher dependence on imports, thereby undermining economic stability.

C. It fosters the expansion of local industries and enhances a country's economic sustainability.

D. It exclusively advantages international businesses at the expense of domestic businesses.

8. How would the implementation of an ICV initiative impact investment decisions from a risk management perspective?

A. It reduces risk by creating a stable domestic investment atmosphere.

B. It increases risk through overreliance on imports.

C. It raises risk by restricting the range of diversification choices within a country.

D. It does not affect risk significantly, as its main emphasis is on production activities.

9. How does the ICV initiative generally impact the international workforce?

A. It supports the practice of outsourcing labour to more cost-effective foreign countries.

B. It reduces the dependency on the international workforce.

C. It results in a reduction in employment chances for domestic workers.

D. It promotes cooperation among domestic and foreign employees.

10. What is the possible effect of allocating resources towards research and development activities with regards to the ICV program?

A. It has the potential to reduce dependence on domestic resources, thereby compromising the objectives of the ICV program.

B. It plays a crucial role in promoting innovation, fostering local capabilities, and improving competitiveness in the industry, thereby strengthening the effectiveness of ICV initiatives.

C. It may result in a rise in the delegation of research and development tasks, thereby diminishing the effectiveness of the ICV program.

D. It might result in a transition towards the importation of technology, thereby diminishing the primary focus of the ICV program on generating local value.

B. Short Essay Questions:

1. What are the economic growth measurements? Explain the difference between them?

1. How can investment activity impact the country's economy in the long run?
2. Why does the concept of ICV have a significant impact on a country's GDP?
3. How could ICV contribute to the improvement of the local workforce?
4. What role does the ICV scheme in Oman play in promoting entrepreneurship opportunities?

C. Long Essay Questions:

1. Explain how the ICV program would promote entrepreneurship and SMEs. Highlight how this would be reflected in the local economy and unemployment rate. Provide relevant examples to support your discussion.

2. Although there are many benefits associated with applying to the to the ICV program, it could negatively impact the local economy in general and the workforce in particular. Compare these benefits and drawbacks and express your opinion on how to overcome these drawbacks.

D. Cases Studies

Case study 1: Petroleum Development Oman's Investments and the ICV program

Petroleum Development Oman (PDO) is a major exploration and production company in Oman. The PDO company is responsible for delivering approximately 70 percent of Oman's production of crude oil as well as the country's gas supply. PDO's goal is to disseminate the rewards of the oil and gas sector throughout Oman through the implementation of the ICV strategy. The company is dedicated to enhancing the acquisition of domestic goods and services while also enhancing the skills and abilities of Omanis and businesses to ensure long-term economic advantages for the country. The ICV strategy of PDO is founded upon four primary pillars, namely services and goods, domestic economic development, and investments in society.

The company is responsible for making significant contributions to the financial system of Oman. These contributions include the generation of profits, creating employment prospects, and fostering growth in the economy within the country. As a result of the investment of resources by the PDO to discovery, production, and development of infrastructure, the energy sector appears to be an essential component of Oman's economy. In addition, the purchasing practices of PDO place a high emphasis on local content, thereby promoting the development of local sectors and facilitating the diversification of the economy.

PDO prioritizes the allocation of funding to programs for social development with the goal of enhancing the overall domestic welfare. The PDO employs an organizational strategy to allocate funds among various industries, including infrastructure, medical care, schooling, and the development of communities, in order to improve the availability of essential services and foster unity within society. Furthermore, the PDO strategically distributes

capital to promote resilience and encourage the implementation of environmentally friendly procedures in the energy industry.

The PDO provides training opportunities and scholarships aimed at promoting skill enhancement and enhancing technical proficiencies. The PDO facilitates the full participation of Omanis in the oil and gas sector through the allocation of resources aimed at improving the quality of human capital, thus contributing to a cohesive and resilient ecosystem. The PDO plays a pivotal role in fostering the holistic advancement of Oman by offering avenues for Omanis to enhance their expertise and education. Consequently, this results in a stronger and more stable industry that can endure variations in the oil and gas sector.

Questions

1. What are the factors that would impact PDO's capital allocation decisions in supporting the ICV program?
2. In what manner do the investments made by PDO foster growth and diversity in Oman's economy?
3. What obstacles does PDO encounter in attaining its objectives of promoting domestic value through capital allocation? What strategies could PDO employ to address these obstacles and risks?
4. How do PDO investments contribute to Oman's vision for 2040?

Case study 2: Norway a success story of local workforce development

Norway has implemented a variety of initiatives with the objective of effectively implementing local content policies to enhance the local workforce. Norway mandates that oil and gas companies give priority to employing local workers. Companies involved in operations on the Norwegian Continental Shelf must comply with a specified proportion of Norwegian workers within their workforce. This approach ensures the creation and maintenance of job opportunities within the local workforce, thus promoting economic growth and sustainability. In Norway, multinational energy corporations often establish collabourations with local colleges and universities, academic institutions, and technological hubs to promote knowledge sharing and the spread of effective strategies. This initiative facilitates the development of skills and nurtures innovation within the domestic workforce.

The Norwegian government has allocated significant resources towards tailored training and educational initiatives in order to cultivate a skilled

workforce for the energy sector. Programs of this nature serve to enhance the acquisition of technical and professional competencies essential for securing employment within this particular field, thereby augmenting the pool of competent individuals in Norway. There have been various initiatives implemented by Norway to provide support to domestic suppliers and promote their involvement in the energy sector. The Norwegian Oil and Gas Association offers the Supplier Development Program as an illustrative example of such an initiative. This program provides guidance and instruction to suppliers within the country. These initiatives promote the development of crucial skills and competencies among domestic businesses, allowing them to maintain competitiveness within the local industry and consequently create additional employment opportunities for domestic workers.

Norway incorporates provisions for local content into contracts awarded to energy companies in order to promote the expansion of its economy and workforce. Possible conditions may encompass limitations regarding the use of local subcontractors, vendors, and labour for the execution of the project. For example, agreements pertaining to the development of offshore platforms and drilling equipment may stipulate a specific proportion of Norwegian involvement, thereby promoting the generation of domestic employment opportunities and facilitating economic growth within Norway. Moreover, the associations within the Norwegian energy sector exert a substantial influence on the advancement of local content and the expansion of the domestic labour force. A collabourative effort is undertaken by the Norwegian Oil and Gas Association to establish criteria and strategies for the implementation of local content. These partnerships promote active participation among businesses, government bodies, and other relevant stakeholders to enhance the growth of the local labour market.

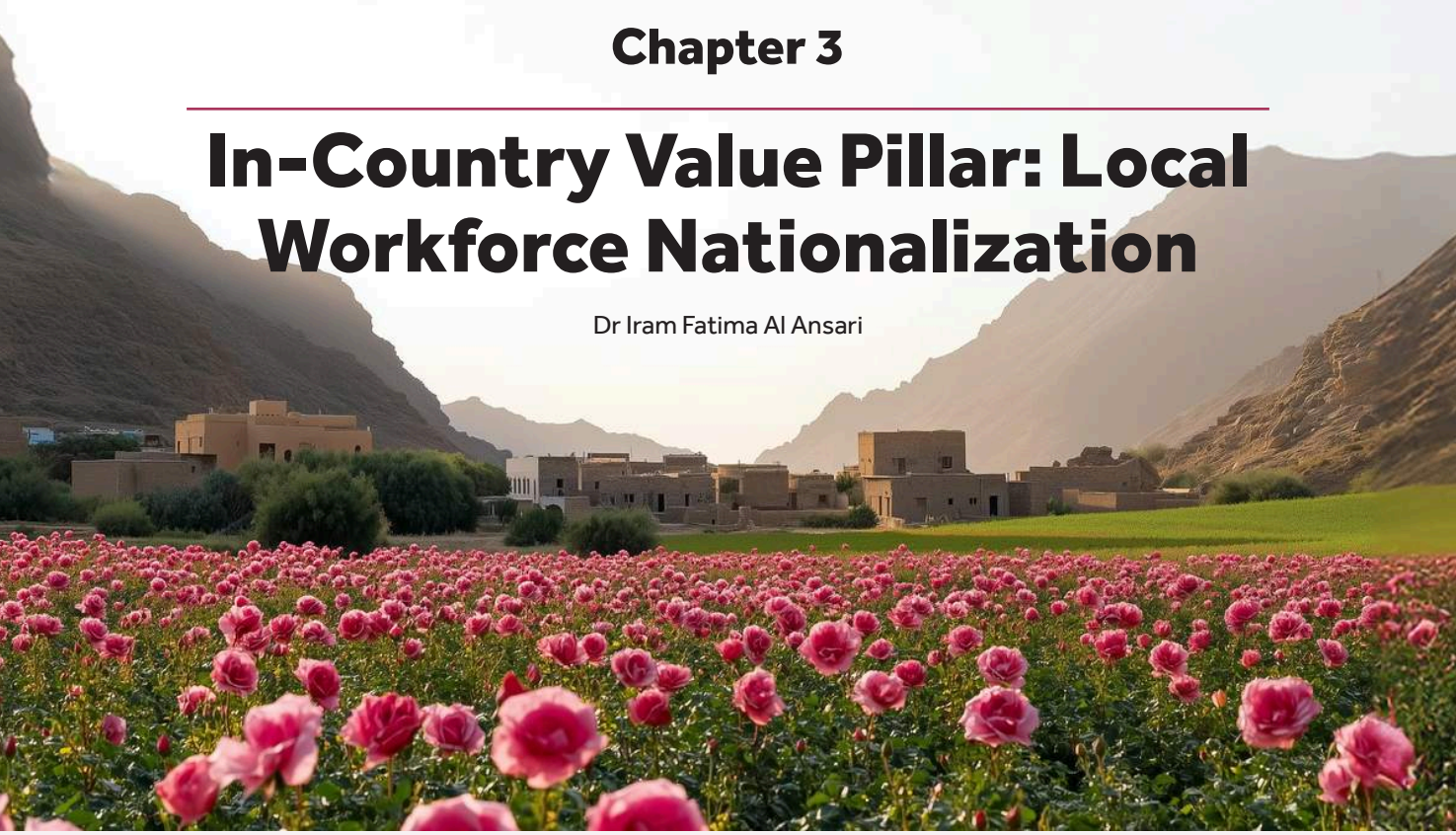
Questions

1. Can you explain the role of Norway's oil and gas industry associations in developing the domestic workforce?
2. In what ways does Norway facilitate the sharing of innovations and the exchange of expertise between multinational corporations and domestic workers within the oil and gas sector?
3. What impact would Norway's efforts to develop its domestic workforce have on the global labour market?

Chapter 3

In-Country Value Pillar: Local Workforce Nationalization

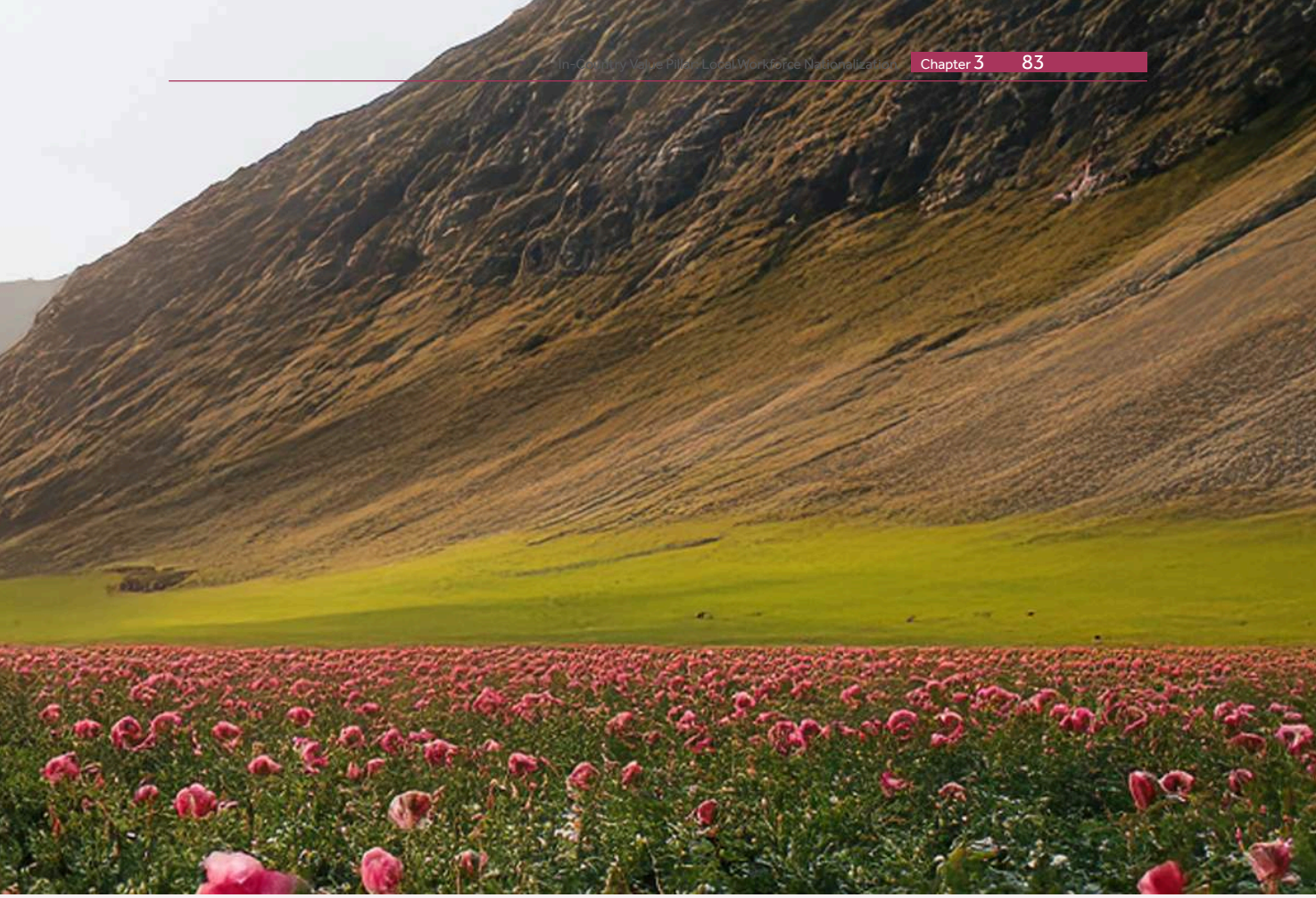
Dr Iram Fatima Al Ansari



Abstract

The ICV initiatives aim to support the local economy and community by upskilling and providing employment opportunities, thus contributing to the local future vision (e.g. the Vision 2040 goal of a knowledge-based economy in Oman). Currently, many countries mandate the employment of qualified nationals to enhance economic growth and address high unemployment rates. For instance, the concept of "Omanization" in Oman has been a key strategy, although its success varies across sectors. The ICV model focuses on raising employment, developing local skills, and increasing partnerships with multinational corporations. Workforce nationalization involves targeted education, training programmes, and policies aimed at reducing reliance on expatriate labour. ICV in Oman in terms of the workforce's efforts has been significant in public sectors but lags behind in the private sector, highlighting the need for continuous improvement and strategic alignment with national development goals.

Keywords: *Omanization, ICV, workforce nationalization, upskilling, employment opportunities*



Learning Objectives:

- To analyse the impactof human capital and workforce nationalization in ICV.
- To evaluate talent development strategies with national development priorities.
- To understand knowledge-based economy and the importance of skills development.
- To evaluate the workforce component in the ICV model regionally and internationally.
- To analyse the challenges associated with the workforce component in the ICV model of Omanization.

Introduction

The ICV initiatives aim to enhance the long-term sustainability of the country's economy and maximize benefits to citizens through upskilling and employment opportunities, among other objectives. By strategically investing in and leveraging its human capital, Oman can harness its demographic potential to achieve "demographic dividend" and reduce the potential "demographic disaster". It is, nonetheless, also evident that achieving the shift to the "post-oil", "knowledge-based economy" enshrined in the country's Vision 2040 will not be straightforward. Currently, the employment of suitably qualified nationals is mandated. The objective is to generate job opportunities locally, which in turn fosters income growth, enhances the skill development of the national workforce, and contributes to the overall economic expansion of an oil-producing nation (Olawuyi, 2021, p. 383).

Local employment consistently ranks as one of the citizens' highest concerns, frequently being a key factor in disputes, grievances, and conflicts (Ovadia, 2015). Increasing local job opportunities can garner more support for projects. Employing more citizens and community members can enhance company-community relations, thereby helping foreign investors secure the social licence to operate (World Bank, 2014). Considering the adverse effects of resource development on surrounding areas, focusing on local content (i.e. in-Country Value) can help mitigate these impacts by creating jobs and adding value within the communities (Ado, 2013). Hence, key ICV components related to workforce development (WD) in Oman should increase their focus on procurement policies, capacity-building programmes, technology transfer, local supplier development, and long-term partnerships with multinational corporations.

The aim of this chapter is threefold: first, to provide a comprehensive framework for understanding the role of human capital (i.e. the local workforce) in driving ICV efforts in the Sultanate of Oman; second, to emphasize the importance and the related challenges of nurturing, developing, and retaining a skilled workforce to achieve long-term economic prosperity and national development goals; third, to contrast the subcomponents of local workforce development in the ICV model in Oman with those observed internationally. The aim of this chapter will be achieved through five learning objectives.

The Role of Human Capital and Workforce Nationalization in ICV

The concept of human capital is pivotal in enhancing a company's ICV efforts in Oman, representing a core component in fostering economic diversification and sustainable growth. Human capital (HC) refers to the qualities and capabilities of individuals that can drive productivity and innovation, encapsulating skills, education, experience, and

knowledge (Schultz, 1961). By investing strategically in developing and retaining local and expatriate talent, companies can significantly amplify their ICV contributions. For local talent, initiatives such as targeted education programmes, vocational training, and professional development pathways are vital. Such investments ensure that Omani nationals have the requisite skills and knowledge to participate effectively in high-value sectors, thereby promoting economic diversification away from a traditional reliance on oil and gas. Concurrently, retaining experienced expatriate talent facilitates knowledge transfer, whereby advanced skills, methodologies, and technological know-how are imparted to the local workforce. This cross-pollination of expertise enriches the local talent pool, fostering innovation and enhancing overall productivity. Moreover, a focus on HC development aligns with broader national goals, such as Oman Vision 2040, which seeks to create a knowledge-based economy with a robust and diversified industrial base. Through these efforts, which will be elaborated further in the ensuing two sections, businesses not only fulfil their ICV obligations but also contribute to a resilient and dynamic economic ecosystem.

Promoting local talent through "workforce nationalization" has been a major part of the HC development initiatives in Oman. The policy of workforce nationalization, referred to as "Omanization" in Oman, was introduced to address the government's concerns over the private sector's significant dependence on expatriate labour and the high unemployment rates among local citizens (Alfarhan & Al-Busaidi, 2018; Elbanna *et al*., 2023; Goby, 2015). Established by Royal Decree 95/97 in 1988, the Omanization programme aims to replace expatriate workers with skilled Omani nationals (UN-ESCWA, 2022). Although Omanization has successfully achieved an 89% representation of Omanis in the public sector (NCSI, 2024), it remains significantly lower in the private sector, with only about 22% as of December 2023, falling short of the 75% target predicted by Oman Vision 2020 (NCSI).

In more detail, as per the official employment indicators in December 2023 (NCSI, 2024), the total workforce in Oman is 2,672,668,[1] of which 32% are Omani and 68% are expatriates. Of these, the public sector employs 421,034 – 89% (i.e. 376,856) Omani (75% male, 25% female) and 11% expatriate (67% male, 33% female). On the other hand, the private sector employs 1,846,189 – 21.6% (i.e. 397,847) Omani (71% male, 29% female) and 78.4% expatriate (96% male, 4% female).

Within the private sector, the economic activities providing 70% of employment are: "construction" 24% (18% Omani, 82% expatriate); "wholesale, retail trade & repair of motor vehicles, motorcycles" 15% (22% Omani, 78% expatriate); "manufacturing"

1. This number excludes those working in "family" firms, as per the NCSI's definition. The total workforce in family firms is 405,445, of which 76,545 are Omani as of December 2023 (NCSI, 2024). https://www.ncsi.gov.om/Elibrary/LibraryContentDoc/ben_Monthly%20Statistical%20Bulletin%20%20May%202024_ab1d373c-e784-475e-be15-c32208479ba0.pdf

13% (28% Omani, 72% expatriate); "accommodation and food service activities" 12% (7% Omani, 93% expatriate); and "agriculture and forestry & fishing" 6% (27% Omani, 73% expatriate) (NCSI, 2022, pp. 102–103[2]). Despite the high employment rates of expatriates in some sectors, Omanis are more significantly represented in several secondary economic activities. These include financial and insurance services (86% Omani), electricity, gas, steam, and air conditioning supply (74% Omani), mining and quarrying (71% Omani), education (50% Omani), and professional, scientific, and technical activities (49% Omani) (NCSI, 2022, pp. 102–103).

The aforementioned data illustrate that Oman exhibits a clear example of labour market segmentation due to the coexistence of Omani nationals and expatriates. This segmentation creates distinct submarkets or segments, each characterized by unique attributes and behavioural norms (ILO, 2022, para. 1). This segmentation and its consequences give rise to labour diversity that affects the culture and norms in the workplace, and condition the employability of certain groups due to recruitment preferences (Triandis, 1994). Nevertheless, given the emphasis on workforce nationalization highlighted by the former ruler, Sultan Qaboos bin Said, and his successor, His Majesty Sultan Haitham bin Tarik, several national-level employment initiatives to increase Omanization have been implemented. The idea is to have a piecemeal strategy that involves implementing a series of gradual, coordinated steps rather than attempting a large-scale transformation all at once – as was attempted in the past – and to focus on capability development rather than simply replacing a foreigner with an Omani based on nationality alone. Before delving into the piecemeal strategy (presented in Section 3.4), you should familiarize yourself with the three important themes research reveals on workforce nationalization, i.e. its conceptualization, the role of institutional policies, and HRM practices and outcomes.

Framework of Workforce Nationalization

Studies on workforce nationalization have presented several definitions of the concept. Our focus is mainly on conceptualizing nationalization in Oman and the neighbouring countries, i.e. the GCC, as a framework to understand the local initiatives. Table 3.1 summarizes the workforce nationalization concepts and definitions drawn from selected research.The overarching strategy for workforce nationalization in Oman and the broader GCC region revolves around two main principles: (i) improving the employability of the national labour force by equipping them with the necessary knowledge, skills, attitudes, and values for a knowledge-based economy through effective education, training, and

2. These numbers are derived from the 2022 annual report because the latest one for 2023 is not yet available. The difference between the two years is minimal and does not influence the overall understanding of the status of workforce percentages in the respective sectors.

Table 3.1: Workforce nationalization concepts and definitions (GCC only)

Study	Concept (Country)	Definition	Key Themes
UN-ESCWA (2022, p1)	Omanisation (Oman)	A policy enacted in 1988, aimed at replacing expatriate workers with trained Omani personnel	› Oman sets quotas for various industries to reach in terms of the ratio of Omani to foreign workers › Reducing dependence on foreign labour
Forstenlechner et al. (2012a, p409)	Emiratisation (UAE)	a process to «overhaul educational systems and more closely aligning the skills taught with the needs of the market... [and to] implement a range of direct labour market intervention measures such as setting quotas and the allocation of certain roles to be staffed solely by nationals»	› Reform educational systems › Alignment between education and skills needed in the market › Labour market intervention to implement localisation
Toledo (2013, p40)	Emiratisation (UAE)	a government policy designed to increase the participation of native workers in the production of goods and services in the private sector	› Planned replacement in specific sectors
Goby (2015:417)	Emiratization (UAE)	attaining full employment within the national labour force, reducing the reliance on foreign labour and developing market-oriented skills among locals	› Creating employment opportunities for locals › Reducing the reliance on expat labour › Enhancing employability for local workforce

Table 3.1 (contd.)

Study	Concept (Country)	Definition	Key Themes
Waxin et al., (2018:100)	Workforce Localisation (UAE)	the recruitment and development of citizens to increase their employability, thus reducing a country's dependency on expatriate labour	› Activities such as recruitment, › training and development for enhancing local employees' capabilities › Creating employment opportunities for national citizens
Olver-Ellis (2018:19)	Workforce Localisation (Qatar, Kuwait, KSA)	Qatarization is a formal regulatory frameworkfocus on 'quality not quantity' based nationalisation of workforce."	› Increase participation of national workforce in private sectors, through human capital advancement mechanisms › transform into a knowledge-based economy
Abaker et al., (2019: 458)	Saudization (KSA)	A policy that includes "restrictions to recruiting expatriates in the public sector as well as private companies in order to reduce foreign employees and rely more on locals"	› Limit the reliance on expatriates' workforce › Planned replacement in specific sectors, mainly in the private sector
Rutledge et al. (2011:183)	Labour Nationalisation (GCC)	It includes "direct labour market intervention, such as reserving certain job categories for nationals, and indirect intervention by way of human resource development"	› Direct market intervention › Indirect market intervention

proper execution of human resource initiatives; and (ii) implementing quantitative and qualitative measures at both the national and organizational levels to evaluate the success of the nationalization strategy (Elbanna *et al*., 2023).

These tenets are derived from the several definitions and frameworks presented in the workforce nationalization studies conducted in the GCC in the last two decades. The fundamental idea behind workforce nationalization is to equip the local workforce with "soft" and "hard" skills to enable them to excel in their disciplines and line of work and be more attractive to organizations rather than being forcefully positioned as a result of rigid nationalization quotas (Forstenlechner *et al*., 2012; Rutledge *et al*., 2011).

These principles emphasize the significance of assessing the effectiveness of nationalization strategies at both national and organizational levels through the use of quantitative metrics (such as the percentage of nationals employed, retention rates, and turnover rates) and qualitative metrics (such as employee and supervisor satisfaction, behavioural and attitudinal evaluations of employees, and alignment with organizational goals) (Elbanna *et al*., 2023).

Role of Institutional Policies

The institutional context comprises norms, regulations, and cognitive frameworks that establish the environment for human and economic interactions (Scott, 2013). Therefore, assessing the nationalization strategy necessitates concurrently analysing the institutional context where these policies are implemented (Al-Waqfi & Forstenlechner, 2014; Elbanna, 2022; Glaister *et al*., 2021). In this regard, it is important to understand the role of public and institutional policies (Elbanna *et al*., 2023).

Public and institutional policies in nationalizing the workforce refer to a set of formal rules, guidelines, and initiatives crafted by both government and organizational institutions aimed at increasing the employment of Omani nationals within the workforce. These policies are structured to create conditions that support the goals of Omanization, ensuring that the transition from expatriate to local employment is both effective and sustainable. Primarily, these policies aim to (i) diversify the economy by encouraging Omanis in sectors other than only oil and gas, (ii) build a skilled and adaptable workforce to sustain economic growth, and (iii) increase social stability and reduce overreliance on the expatriate workforce. Nevertheless, research suggests that the formal regulations and mechanisms are still immature and less efficient than anticipated.[3]

Three key areas are covered in the following subsections. First, albeit to different degrees, depending on the sector, the government plays a significant role in influencing nationalization policies and practices through specific administrative interventions

3. Country-specific studies may be referred to for more insights, i.e. Glaister et al. (2021) in Oman in general and Ansari and McGlade (2018) in Oman specifically youth-related; Jabeen et al. (2018), and Sarkar and Rahman (2020) in the UAE; Mellahi (2007) in Saudi Arabia; and Berrebi et al. (2009) in Qatar.

that dictate how businesses manage their national and expatriate workforce. These direct intervention measures, such as quota systems, have been rather ineffective thus far (an assertion supported by the following studies: Jabeen *et al*., 2018; Peck, 2017). Additionally, these institutional policies have intensified the pressure on certain sectors more than others to prioritize localizing their workforce (Ali *et al*., 2020; Williams *et al*., 2011). In Oman, for example, the banking and financial sector, the aviation sector, and the utilities sector have gone through greater regulatory oversight in terms of achieving workforce nationalization, resulting in substantial success in complying with the goals of Omanization. In sum, such government interventions contribute to regime stability by continuing to sustain the image of the state as one that provides for its citizens (BTI, 2024).

Second, while institutional regulations imposed penalties on organizations that fail to employ nationals, they also inadvertently provided defences and loopholes to avoid these sanctions. Research in the GCC has documented the strategies organizations have adopted to evade such penalties. Sidani and Al Ariss (2014) highlighted the fragmented nature of related policies and described the influence of institutional pressures on the management of national talent as a necessary compromise.

Third, due to the ineffectiveness of quota systems, some studies have focused on exploring reform initiatives aimed at improving nationalization efforts in the GCC countries, which have been recently implemented to address various challenges (Elbanna, 2022). For instance, Ansari and McGlade (2018) and Moideenkutty *et al.* (2016) looked at the Omani government's strategies for combating low local employment, including the reservation of specific trades and occupations exclusively for Omanis.

Despite these findings, further investigation into specific institutional policies or reforms aligned with the country's Vision could clarify the government's role in achieving Omanization targets. This includes effectively integrating Omanis into the labour market and reducing reliance on foreign workers.

HRM Practices and Outcomes of Omanization

Human resource management (HRM) practices in the context of workforce nationalization refer to the strategic approaches and activities employed to manage and develop a nation's human resources, with the specific aim of increasing the employment and integration of national citizens within the workforce. In Oman, these practices are aligned with Omanization objectives by promoting the recruitment, development and training, and retention of Omani nationals in various sectors of the economy. For example, Budhwar and Mellahi (2007) explore the skills enhancement programmes in Oman and their impact on enhancing the employability and career progression of Omanis. Glaister *et al.* (2021)

examined how the implementation of workforce nationalization in Oman influences managers to adapt their talent management strategies.

HC development and Omanization, however, have given rise to organizations often implementing two distinct HRM systems: one tailored for Omani nationals and another for expatriates. These systems differentiate specific practices such as selection processes (e.g. screening, selection standards, and selection steps), staffing, comprehensive training and development programmes, career planning, competitive compensation and benefits packages, and robust performance management.

In this context, Moideenkutty *et al.* (2016) explored HRM practices aimed at attracting, motivating, and retaining local employees in Omani organizations, highlighting how these practices are distinct from those used for managing expatriate employees. The authors found that effective localization HRM practices lead to improved financial performance and accentuate Omanization goals.

The effectiveness of workforce nationalization can be assessed using both quantitative and qualitative metrics. Quantitative metrics typically include the number or percentage of nationals employed, recruitment and employment statistics for nationals, enrolment in training programme, and retention or turnover rates for both nationals and expatriates (Waxin *et al.*, 2018). Complementing these statistics, qualitative measures are derived from satisfaction surveys of nationalization programmes, assessments of employee behaviour and attitudes, evaluations of fresh graduates and senior executives, and the alignment with organizational culture (Elbanna *et al.*, 2023). Up-to-date workforce nationalization data are available through the Oman Ministry of Labour (MoL) and the NSCI. Typical measures include the increased number of Omanis employed across various sectors, the percentages of Omanization quotas achieved, and the overall spend on the training and development of employees. Whilst the MoL data are at the national level, the latest ICV Achievements Report compiled by the Oman Society for Petroleum Services and the Oman Ministry of Energy and Minerals presents the HC development and workforce nationalization efforts by 28 oil and gas sector companies. A summary of the outcomes of selected companies is presented in Table 3.2.

Whilst the oil and gas sector companies have taken the first steps towards improving ICV in Oman, there is still work to be done. Finally, transparency and data quality are equally important in order to have a clearer picture of how far we have come, what has worked or not worked, and how we can improve. Open and honest feedback loops will also help in assessing the existing ICV model and in improving it further.

Table 3.2: Workforce-related ICV achievements of selected Omani oil & gas sector companies

No	Name of Comapny	Human Resourcecs Recruitment		Training & Development of Omanis by Type					Entrepreneurial OR Youth development Programs	Omanisation
		Oman (Headcount / 10%)	Contracted / Sub-contracrted Omanis	Leadership / General	Vocational / Technical	Students / Grades	Scholarships	Total Spend (if mentioned)		
1	Petroleum Development of Oman	50,000	14,000	18,000	√	√	√	$ 51 m	«Tazeez» program to help SMES compete for PDO contracts. Benefitted >500 SMES. $305m direct spend on SMEs› development (2020)	>85%
2	Occidental of Oman	3,400	13,800 (51%)	NS	160	1,200	NS	NS	"Dot Next" (1,200 recruited)	94% Overall 90% at leadership level 95% Engineers 98% Opeators & Technicians
3	BP	89%	63%	NS	√	NS	NS	$ 2.3 m		89%
4	OQ	5,355	NS	242	NS	512	109	NS		87%
5	CCED	90%	NS	NS	NS	NS	NS	$ 1m	$1m SME development	
6	Daleel Petroluem	96%	NS	250	NS	NS	NS	$ 3.6m	SME development: • Mentorship Program (2016-17) • Tasaru Program (2018-19) • Khutwa Program (2019) • Istimrar Prgram (2020)	96%
7	Schlumberger	1,300 new	NS	NS	NS	NS	NS	$ 6 m	Training partnership with Takatuf Oman	85%
8	Petrofac	60 new	NS	NS	60	NS	NS	NS	$140m awarded to SMEs through the Duqm Refinery Project	350 Omanis
9	STS	2,932	NS	NS	NS	NS	NS	NS	Training done through TTI, 100% subsidiary of STS with 80% Omanisation	34.70%
10	Gulf Energy	600 new (2024-24)	NS	NS	NS	NS	NS	$ 2.5 m	Opening of tools manufacturing facilities to create job and training opportunities	84%
11	Al Sawari international investment company	~190	NS	NS	√	NS	NS	$220,000	>52 SMEs assigned with $22m	93%
12	Al Shawamikh oil services	~484	NS	√	√	√	NS	$1 m		74%

NS = Not Stated

Slurce: ICV Achievements (2022), ME&M, OSPS

Aligning Talent Development Strategies with National Development Priorities

Talent development and management refers to the strategies through which employers foresee and address their human capital requirements. This process focuses on placing the right individuals, possessing the appropriate skills, into suitable roles at optimal times (Keller & Cappelli, 2014). It involves identifying and nurturing positions that significantly contribute to the organization's long-term competitive advantage (Collings & Mellahi, 2009). Essentially, talent development is a strategic, competitive, and planned activity conducted by the organization (Vaiman *et al*., 2012). The cumulative effect of this activity boosts a nation's overall talent pool, and the value generated by such talent. Aligning talent development strategies with national development priorities is crucial for fostering a resilient and competitive workforce. In the context of Oman's ICV model, effective talent development facilitates Omanization and supports the broader goals of economic diversification and sustainable growth outlined in Vision 2040. In this section, we explore some of the talent development initiatives in Oman.

National Employment Programme: Tashgheel

Tashgheel is one of the programmes supervised by the Ministry of Labour in Oman. The primary objectives of this programme are:

i. to enhance employability by preparing Omanis to meet the demands of the evolving job market;

ii. to create jobs by facilitating opportunities in both public and private sectors;

iii. to reduce unemployment through targeted support and training programmes;

iv. to support the Vision 2040 workforce development plan by enhancing human capital.

The Tashgheel programme involves several initiatives summarized in Table 3.3.

Table 3.3: Key initiatives and projects under the Tashgheel programme as per Vision 2040

Key Initiatives and Projects	Description/Objective
Career guidance platform	To improve workforce readiness and preparedness and equip the industry with trained cadres in accordance with its needs. The platform was launched in 2023 and is available to all users.
Integrated platform connecting the demand and supply of the employment market (Marsad)	To create an interactive online platform that aligns with top technical and international standards for classifying and analysing labour market data, ensuring policymakers have access to current and accurate market information. This platform's services are now accessible to decision-makers across more than 23 government units.
Self-employment support and incentives scheme	To create a supportive environment and social safety net for professionals and entrepreneurs by proposing a comprehensive social protection system for artisans and business owners. This initiative aims to ensure they can maintain a decent standard of living while continuing their professional activities and business ventures.
Raising the qualitative Omanization percentages in the plants operating in The Public Establishment for Industrial Estates (Madayn)	To establish a comprehensive methodology to integrate national professionals into a training and qualification programme aimed at senior and specialized management roles. The goal is to increase the annual Omanization rates in leadership and supervising ministry positions within plants and organizations that currently have low Omanization rates, over a three-year period.
Technical camps	To equip Omani youth with the necessary skills in telecommunications, information technology, and e-commerce by enhancing the abilities of graduates and jobseekers in these sectors and increasing employment opportunities for them.
E-Commerce camps	To develop and enhance the skills of national cadres in the e-commerce sector to boost the employability of jobseekers who currently lack the necessary qualifications to enter the labour market. The National Employment Programme, in collaboration with the Ministry of Higher Education, Research and Innovation, and the Ministry of Labour, has signed an agreement to train 1,200 male and female students who do not possess a general education diploma but are registered as jobseekers.

Source: Sustainable Finance Framework (2024, p. 22)

Furthermore, as part of Oman's Sustainable Finance Framework (SFF), one of the eligible green expenditures that has been approved to help the Omani society address the issue of unemployment is support for micro, small, and medium enterprises (SMEs) or unemployed persons. These employment generation and associated initiatives aim to mitigate and address unemployment resulting from socio-economic crises, potentially through the impact of SME financing and microfinance.

This includes government schemes to support unemployed persons who are out of work involuntarily such as temporary financial assistance and programmes aimed at supporting re-employment under the National Employment Programme (Tashgheel). Also included would be government schemes related to training and reskilling for unemployed youths under the Tashgheel programme (Sustainable Finance Framework, 2024, p. 30).

As an extension of this, the Ministry of Finance and Oman Investment Authority have established a fund to stimulate the private sector and support SMEs, aligning with the government's focus on economic diversification. The fund aims to attract foreign investment, support SMEs, finance private sector projects, stimulate venture capital, and complement government financing schemes. With a capital of approximately OMR2 billion, the fund allocates 90% for direct local investment and 10% for SME support and venture capital projects (KPMG, 2024). Eventually, these projects are expected to contribute further to job creation for Omanis.

Specialized Programme for Senior Technical Positions in Insurance Sector – Tamkeen

The Tamkeen programme, initiated by the Capital Market Authority (CMA) in 2015 for the insurance sector, is another good example of national initiatives to boost the employment and employability of Omanis. This ambitious programme aims to empower Omani youth in technical roles by offering customized training programmes based on sector data analysis, executed annually by the CMA, and monitoring company-provided training (FSA, 2023).

Tamkeen's strategic approach focuses on replacing expatriate staff in technical, senior, mid-management, and operational positions with qualified Omanis. This initiative meets local market needs and enhances competition within the financial sector. By creating an attractive environment, Tamkeen aims to retain specialized national talent, prevent skills attrition, and ensure the quality of Omani cadres through effective human resources administration and relevant training programmes.

The initiative has achieved significant success, as reflected in the annual data up to mid-2023, which show the execution of 88 specialized training programmes, empowering

2,400 employees in collaboration with various training institutes. Tamkeen's goal is to increase Omanization across all levels of positions within the insurance sector. In mid-2023, Omanization rates were 83.36% overall, with 59.73% in senior positions, 78.13% in mid-level positions, and 90.18% in operational roles (FSA, 2023). Efforts continue to enhance specialized positions for Omani employees through professional certifications like CERT CII, ARM, and CIPD (FSA, 2023).

In sum, aligning talent development strategies with national development priorities is crucial for fostering a resilient and competitive workforce in Oman that will contribute to improving ICV. Through initiatives like Tashgheel and Tamkeen, Oman is enhancing employability, reducing unemployment, and supporting economic diversification.

CASE STUDY 1: Workforce Development through Competitive Advantage and Innovation

In Oman, enhancing In-Country Value (ICV) strategically is vital for sustainable economic growth. Abdelfattah *et al.* (2024), in their study "The future of competitive advantage in Oman", demonstrate a positive correlation between green product innovation performance, R&D investments, AI adoption, intellectual capital, and government involvement with firms' competitive advantage. These factors collectively bolster a firm's competitive edge by enhancing customer loyalty, elevating brand reputation, ensuring regulatory adherence, and driving innovation. For instance, companies that engage in environmentally friendly product development benefit from increased customer loyalty and a stronger brand image. Moreover, adopting AI technologies helps streamline operations, reduce costs, and enhance decision-making capabilities, while R&D investments lead to cutting-edge products that meet market demands. The study underscores the role of intellectual capital in maximizing the benefits of these investments and highlights the importance of government involvement in creating a supportive environment for innovation and competitiveness. By leveraging these insights, Omani firms can prioritize green product innovation, invest in R&D, adopt AI technologies, and foster a knowledge-driven culture to enhance their competitiveness and contribute to the nation's ICV goals. Technical camps to train and involve Omani's in these developments will further help to boost ICV.

Source: Adopted based on the study of Abdelfattah *et al.* (2024). *International Journal of Innovation Studies*. 8, pp. 154–171.

Promoting Knowledge Transfer and Skills Development

The term "knowledge-based economy" (KBE) refers to an economic model where knowledge-intensive activities in production and services drive rapid technical and scientific advancements, leading to rapid obsolescence. This model relies heavily on intellectual capabilities rather than physical inputs or natural resources (Powell & Snellman, 2004, p. 199). Oman's Vision 2040 outlines seven strategic objectives to transition towards a KBE, following the World Bank's (2013) four pillars: education and training, information infrastructure, economic incentives and institutional regime, and innovation systems. These objectives are (OVIFU, 2022, p. 20):

- To develop a robust national system that promotes scientific research, innovation, and creativity, fostering a knowledge-based economy and society.
- To empower human capabilities within the educational sector.
- To establish a high-quality educational system that engages societal partnership.
- To implement curricula that uphold Islamic values and Omani identity, reflect Oman's historical and cultural heritage, meet contemporary sustainable development needs, and support diverse learning pathways.
- To create an integrated and independent system to govern and evaluate the educational ecosystem against both national and international standards.
- To ensure diversified and sustainable funding for education, scientific research, and innovation.
- To cultivate national talents with competitive and dynamic skills for both local and international markets.

Oman has been taking serious steps towards the promotion of knowledge transfer and skills development to prepare for the post-oil era; however, there is a need to accelerate these attempts. The strength of a KBE lies in its foundation on abundant knowledge rather than scarce resources like oil (Al-Busiadi, 2020). Unlike traditional resources, knowledge expands with use and application. Oman, like other GCC countries, is striving to establish a KBE. In the 2020 Knowledge Economy Index (KEI), Oman was ranked 47th globally and third among the GCC nations, with the UAE at 42, Bahrain at 43, Saudi Arabia at 50, Qatar at 54, and Kuwait at 64. Oman's KBE status has improved significantly since 1995, when it was ranked 65th globally and fifth regionally. That year, Bahrain was ranked 36, the UAE 46, Qatar 54, Kuwait 57, and Saudi Arabia 78. Oman's long-term vision highlights the importance of a KBE. By 2020, Oman's KEI had increased by 18 points, ranking it 47th out of 145 countries. However, despite the initiatives to build a robust KBE and promote knowledge transfer, Oman still needs to pace up to the

rapidly changing dynamics and market demand.

As highlighted in the literature, education plays a fundamental role in the development of a KBE, and changes are required at the basic school level of education, in terms of developing the awareness and willingness of students to pursue newer areas of specialization rather than taking up the traditional path of obtaining a bachelor's degree in an established field (e.g. Ashour, 2020; Bigagli, 2020; Yamada, 2018). Other critical debates highlighted in the literature are on the role of research and innovation in a KBE (Al-Busaidi, 2020; Hameed *et al.*, 2022), and on a KBE as a pathway to diversify the economy and move away from dependency on oil (Antwi-Boateng & Al Jaberi, 2022). These are critical and urgent issues not only to improve ICV in Oman but also to work effectively towards generating non-oil revenue for the country. Working on education from early stages will also help towards building a diverse and flexible workforce.

In Oman, the Tanfeedh programme outlines some solutions for enhancing the Oman Academic Accreditation Authority's capacity to implement its accreditation system across all academic, technical, and vocational education sectors, including professional qualifications, as well as improving the employability of vocational and technical graduates through better governance and communication with industry (OBG, 2020).

The Tanfeedh programme is aligned with the piecemeal Omanization strategy as envisioned by the late ruler, to boost knowledge transfer. The key components of such a strategy include:

a. setting incremental targets;

b. enhancing education and training programmes;

c. incentivizing employers;

d. building public-private partnerships;

e. strengthening policy and regulation;

f. fostering an entrepreneurship ecosystem;

g. promoting gradual knowledge transfer.

While the long-term benefits of the above initiatives may take years to materialize fully, the government's efforts to make the workforce more flexible are likely to alleviate private sector challenges in the short term. In 2017, the Ministry of Manpower (now Ministry of Labour) introduced new regulations for part-time employment as part of the Tanfeedh initiative, stemming from the Sultanate's ninth five-year development plan. For the first time, this regulatory framework provided Omani nationals with clear criteria for participation in the part-time labour market. It aims to create employment

opportunities for under-represented groups, such as women and retirees, who bring valuable expertise, and to enable students as young as 16 to gain work experience, smoothing their transition into full-time employment.

The regulations also offer significant employee protections. Omani part-time workers can be employed for four to 25 hours per week, with contracts specifying work hours, wages, and job responsibilities. Employers must provide insurance against work injuries and pay a minimum wage of OR3 ($7.79) per hour (OBG, 2020). While some regulations may pose challenges for smaller businesses, the framework's potential to simplify the hiring of Omani citizens will likely benefit the Sultanate overall and ease the path for knowledge transfer, on-the-job learning, and skills development.

In addition to improving education at various levels and skills development programmes, it is also important to emphasize learning from the experiences of seniors – be they local or foreign. In the quest for aggressive Omanization, in addition to replacing an expatriate with an Omani, focus should also be on learning from the experience and under the leadership of a senior expatriate. Though there can sometimes be a bitter relationship when an expatriate "teaches" or trains a national knowing that they will be replaced by the national, it is the responsibility of the individual as well as government regulators to make this experience more amicable and to reward the specialized/senior expatriate accordingly for helping with the development of the Omani workforce. Norway is a good example where highly qualified and experienced foreign workers are encouraged in specialized and in senior positions for nationals to learn from their experience whilst on the job. This has accelerated their process of knowledge and skills transfer. Unfortunately, the process is not always straightforward and can have its own challenges rooted in cultural differences. One such example is Ghana, where foreigners dominate in senior positions in the oil and gas sector, and due to a lack of stringent government policies on nationalizing these positions, foreigners can be very "protective" of their knowledge and skills, unwilling to pass expertise to the Ghanaians.

CASE STUDY 2: Knowledge Transfer on Offshore Rigs in Ghana

Kwesi's Journey and Challenges: From Safety Officer Trainee to the Kitchen!

Kwesi was initially recruited to work on the rig as a roustabout, an entry-level position typically considered unskilled or semi-skilled manual labour. His main duties included ensuring the deck remained clean and free of hazards, relocating equipment around the rig, linking pipe sections for the well, and managing loads with rigging and slinging moved by the crane. Due to his diligent work and commitment, Kwesi's team leader suggested him for safety officer training.

Kwesi took theoretical lessons onshore at the end of his 28-day shifts and underwent practical training offshore. As a trainee Health, Safety, and Environment (HSE) officer, he worked in various departments, including marine, drilling, and technical, to gain a comprehensive understanding of rig operations and HSE issues. However, towards the end of his training, the expatriate HSE officer supervising Kwesi began giving him poor evaluations. Consequently, based on these recommendations, a decision was made to lay off Kwesi.

After negotiations with the Ghanaian recruitment company, Kwesi was reassigned to work in the kitchen – a demotion considering his prior experience. The crew manager of the Ghanaian company that recruited Kwesi acknowledged the challenges faced by Ghanaians but noted their limited ability to intervene. He mentioned that only the Petroleum Commission (PC) has the authority to place supervisors on offshore facilities and intervene in such matters. Local companies risk losing contracts with little recourse against foreign companies.

The crew manager advised that Ghanaian rig workers, including Kwesi, should develop resilience in case they face life-threatening situations offshore. He noted that expatriates naturally try to protect their positions. He encouraged patience, citing an example of a Ghanaian trainee who endured rude behaviour from a Polish crane operator but eventually became a crane operator himself.

In a context where the PC is perceived to have failed in protecting the interests of Ghanaians, workers are left to defend their interests by being patient and resilient. The Rig Workers Association is viewed with mistrust, with allegations of leaders being bribed by influential figures. Although the union's chairman refuted these claims, he acknowledged the resistance from expatriates.

Source: Adopted and modified from Ablo (2018). Scale, local content and the challenges of Ghanaians' employment in the oil and gas industry. *Geoforum*, 96(1), pp. 181–189 (p. 186).

Discussion Questions

1. Reflect on the challenges Kwesi faced during his training and subsequent demotion. What factors contributed to these challenges, and how could they have been addressed to ensure a fairer outcome for Kwesi?
2. Discuss the role of the Ghanaian recruitment company and the Petroleum Commission in this case. What measures could these organizations take to better protect the interests of Ghanaian workers on offshore rigs?
3. Consider the crew manager's advice that Ghanaian workers need to develop a

"tough skin". What are the potential risks and benefits of this approach for the workers and the company's overall work environment?

Comparative Question

4. Contrast the knowledge transfer conditions and challenges experienced by Ghanaian workers like Kwesi with those faced by Omani workers within the context of Omanization. What similarities and differences can you identify, and what lessons can be learned from both contexts to improve knowledge transfer and workforce development?

Source: Adopted based on the study of Abdelfattah *et al.* (2024). *International Journal of Innovation Studies*. 8, pp. 154–171.

In sum, Oman's Vision 2040 aims to build a knowledge-based economy by focusing on education, innovation, and sustainable development. Despite progress, accelerating education and skills development efforts is crucial to meet rapidly changing market demands.

"Workforce" component in the ICV Model – Cross-Country Analysis

The ICV matrix score is a key factor in assessing a bidder's competitiveness. Human capital (HC) is one of the four pillars of the ICV matrix score. In this section, we will illustrate and contrast the subcomponents of this pillar as used in the ICV matrix score in Oman with other selected countries to obtain an understanding of how labour plays a role in creating value in the country specific to its context, unique economic objectives, developmental stage, and industry requirements. Each country tailors its local content policies to align with its broader national goals, whether immediate economic upliftment, long-term sustainable growth, or strategic workforce development.

This section first contrasts the labour component across the GCC countries, namely Oman, the UAE, Qatar, and Saudi Arabia, in detail, and later contrasts the labour component across other selected countries, namely Angola, Brazil, Malaysia, Norway, and South Africa, very briefly. The countries were carefully selected if they had similar characteristics to the existing model in Oman, and a significant proportion of the national economy relied on the oil & gas or minerals sector, or if an oil & cas company ICV framework model was already in place.

Oman and the GCC Countries

ICV scores have been measured at entity, sector, and country levels. In the case of Oman, given that PDO was the pioneer in developing a matrix score that has also been adopted by other companies in the sector (and no national-level model exists), we will use the entity-level PDO ICV score to discuss the workforce component of the model. In each country section for the GCC countries, the overall ICV framework objective (ICV FMO) is stated first, followed by the objective for including the "workforce" or labour component in the respective ICV framework, then the score formula used in the specific country, and finally a discussion on how the subcomponents of workforce feed into the calculations.

Oman

ICV Framework Objective:

To increase Omanization, enhance training, and increase local procurement and spending in the country.

Workforce Component Objective:

To increase the employment of Omanis (Omanization) and develop the skills of the national workforce (PDO, 2021).

Formula:

ICV Score=(20%A1+0%A2)+(80%B1+20%B2)+(70%C1+18%C2+6%C3)+(70%D1+10%D2),

(Source: PDO, 2021)

where:

A = Investment

B = Omanization of the workforce

C = Local sourcing of goods

D = Local sourcing of subcontracted services

Each subcomponent in the above formula is assigned a predetermined "element weight". The total value of each subcomponent is calculated as a monetary value in US dollars (USD), and the assigned weights are used to determine the portion of the subcomponent value that is contributed towards ICV goals. Pillar B relates to human capital or the retained value of the Omani and expatriate bidder workforce within a project towards ICV goals. *B1* refers to compensation paid to Omanis as part of the contract execution in USD, and *B2* refers to compensation paid to expatriates as part of the contract execution in USD. Pillar B is made up of two categories, contractors and subcontractors, and it is for each of these categories that the above model counts for Omani and expatriate ICV contributions. As part of the model input, contractors are required to provide all the workforce related to executing the contract with details pertaining to the main company, lead contractor, or subcontractor as part of the tender.

Contractors must provide the headcount and man-hours data as shown in Figure 3.1. Contractors should update workforce data related to the main contractor as listed under the Ministry of Labour during bidding. The provided numbers must meet the total quantity and Omanization percentage requirements.

Figure 3.1: Workforce ICV plan (the source of this figure must be cited)

Full Contracr Duration Workforce	Table B1: Exixting Workforce Related to the Execution of this Specific Contract During Execution Period (Full Contract duration)												
		Workforce Category	Senior Management			Professional			Supervisory			Skilled / Semi Skilled		
			HD	MH	CP	HD	MH	CP	HD	MH	CP	HD	MH	CP
	Contractor	Omanis	10	8000	$45.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
		Expatriate	6	4500	$34.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
	Sub-Contractor	Omanis	15	4600	$0.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
		Expatriate	11	6500	$0.00	0	0	$0.00	0	0	$0.00	0	0	$10.00
	Total	Omanis	25	12600	$360,000	0	0	$0	0	0	$0	0	0	$0
		Expatriate	17	11000	$153,000	0	0	$0	0	0	$0	0	0	$0
		%	60%	53%	70%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: HD = headcount, MH = man-hours, CP = compensation (hourly average rate from gross salary prorated)

Source: C7: https://www.scribd.com/document/704377918/C7-ICV

Although training is an important element of the ICV framework in Oman, its contribution is not directly part of the formula. Companies that win tenders are often required to contribute a static 1.2% of the contract value towards training and development programmes for Omani nationals, known as the "Injaz Payment" (ICV Blueprint Strategy Guidelines, 2023). Training includes vocational training, professional certifications, and on-the-job training. In the existing ICV model, however, this payment does not take into consideration the Omani-to-expat ratio in the company. The contribution is aimed at enhancing the skills and employability of Omani nationals, ensuring that they can compete effectively in the job market. The requirement is mandated in order to align with the Omanization strategy, by eventually increasing the proportion of Omanis in the workforce, particularly in key industries.

Several companies in Oman that have invested significantly in local training and development have seen improvements in their ICV scores, which can enhance their reputation and ability to win future contracts. However, two factors that must be taken into account regarding the success of the imposed training contribution are: implementation and monitoring, and the quality of training programmes. Effective implementation and monitoring are crucial for ensuring that funds allocated for training are indeed put to their intended use. This may require robust reporting and evaluation metrics. Simply allocating funds is not enough if the quality or relevance of training is poor. Therefore, great emphasis is placed by the government on partnering with reputable and ministry-certified training providers and continuously updating the curriculum to match industry needs.

United Arab Emirates (UAE)

ICV Framework Objective:

To encourage the growth of local suppliers and service providers, develop local capabilities and capacities, and create job opportunities for Emiratis.

Workforce Component Objective:

Increasing the proportion of Emirati employees in the workforce involves hiring more Emiratis, automating tasks currently performed by expatriates, and outsourcing work to local companies. (Source: MOIAT, 2023)

Formula:

$$\text{ICV Score} = \frac{(\text{Total ICV Value} + \text{Emirati Cost} + 0.6\times \text{Expat Cost})}{(\text{Total Cost})\times 50\%,}$$

(Source: MOIAT, 2023)

where:

Total ICV Value = Sum of ICV values for all goods and services procured from within the UAE

Emirati Cost = Total cost of salaries and benefits paid to Emirati employees

Expat Cost = Total cost of salaries and benefits paid to expatriate employees

Total Cost = Total cost of all goods and services procured, including those from within and outside the UAE

In addition to the above, having a higher percentage of Emirati employees can result in bonus points for the suppliers.

The score is calculated as a percentage of the total spend that a company has made in the UAE, based on the comprehensive formula: ICV Score = (Total Spend in the UAE/ Total Revenue) x 100. A more detailed formula was stated earlier and is also shown in Figure 3.2, which indicates that the ICV score formula may vary slightly depending on the industry sector and company size. In all cases, Emiratization is pivotal in achieving the UAE›s overall ICV objective. Companies are encouraged to realize this commitment by implementing a multifaceted approach that goes beyond recruitment, i.e. the following three steps (ICV Certificate, 2024):

i. Actively hiring local Emirati graduates, thereby contributing to their employment and the growth of the local workforce.

ii. Investing in the professional development of Emirati talent through robust training programmes.

iii. Nurturing Emirati employees' progress through mentorship and ongoing guidance.

The UAE's ICV formula also includes expatriate contributions, at a fixed but higher percentage than that considered in Oman. This is possibly due to the population and economic differences between the two countries.

Figure 3.2: UAE ICV formula

MANUFACTURING COST & THIRD PARTY SPEND	INVESTMENT		EMIRATIZATION		EXPAT CONTRIBUTION		BONUS
50%	25%		15%		10%		5%
MANUFACTURERS	10%	$\frac{\text{Net Book Value of Assets in UAE}}{\text{Net Book Value of Total Assets}}$	2%	Up to AED 200K Salary, Training, benefits	1 to 3%	1 to 5 employees	$\frac{\text{Total Revenue from outside UAE}}{\text{Total Annual Revenue from UAE (Excluding Re-exports)}}$
$\frac{\text{Manufacturing cost incured in UAE + Emirati Cost + 60\% of Expat Cost}}{\text{Total Cost}}$					4 to 6%	6 to 50 employees	Growth in NBV Original NBV
SERVICE PROVIDERS	15% Progressive	AED, Million 5 to 50 5%	2-15% Progressive	above AED 200K to 20M Salary, Training, benefits	7 to 9%	51 to 200 employees	No. of Emiratis 100
$\frac{\text{(Value of Purchase x ICV of supplier) +Emirati Cost + 60\% of Expat Cost}}{\text{Total Cost}}$		AED, Million 51 to 100 = 5%			10%	Above 200	
		AED, Million 101 to 150 = 5%					

(Source: MOIAT Classification, 2021, p. 8)

As shown in Figure 3.2, with regard to annual salary, benefits, and training for all Emirati employees, the ICV is calculated as follows:

Up to AED200,000 – 2%, and progressive from AED200,000 up to AED20,000,000 salary – 15%. Salary plus benefits includes all benefits paid to Emirati staff, including salaries, allowances, and other benefits. Benefits for Emirati working abroad will also be viewed as Emiratization benefit (MOIAT, 2021). Calculations also include one-third of the donations made to Sondoq Al Watan or any of the universities listed by the UAE Ministry of Higher Education. Finally, annual training expenditure for Emirati employees is considered in the calculations. External training costs incurred overseas will also be eligible for the benefit.

Qatar

ICV Framework Objective:

To maximize the sustainable 'In-Country Value creation, upskill local talent, develop local suppliers, and promote in-country private investment.

Workforce Component Objective:

To strategically upskill and develop local talent (TAWTEEN, 2023).

Formula:

$$\text{ICV Score} = \frac{(A+B+C+D)}{R}$$

(Source: TAWTEEN, 2023)

where:

A = Goods and services

B = Training of workforce

C = Supplier development

D = Investments in fixed assets

R = Total revenue value in Qatar

In the Qatari ICV formula, it is interesting to note that rather than salary and compensation paid to the employees, the focus is more on spending on workforce training activities – unlike the other three GCC countries discussed in this chapter. Training of workforce includes both internal training activities provided by the company, or sister companies, and external training, delivered by third parties. Companies are also required to specify the type of training, i.e. technical, leadership, or functional. Functional refers to different areas such as problem solving, time management, presentation skills, interpersonal skills, business etiquette, and so on. The mode of training and the number of employees trained will also be included. Finally, the cost of internship and/or cooperative education can be included in this section, if and when applicable.

Saudi Arabia (KSA)

ICV Framework Objective:

To increase the participation of local companies in the oil, gas, and petrochemical sectors and to require foreign companies to meet certain ICV requirements.

Workforce Component Objective:

Training of Saudis and developing their expertise and skills, thus allowing them to progress into higher job position." "Increasing employment opportunities for Saudi nationals in senior positions." (Source: LCGPA, 2022, p. 5)

Formula:

$$\text{Local Content Score} = \left(\frac{(A+B+C+D)}{\text{Total costs}}\right) + \left(10\% \times \left(\frac{\frac{\text{R\&D Expenses in KSA}}{\text{Total Revenues}}}{2\%}\right)\right)$$

(LCGPA, 2022)

where:
A = Local content in goods and services
B = Local content in asset depreciation
C = Local content in labour compensations
D = Local content in capacity building
Total costs = Total in-Kingdom costs of A, B, C, and D above

The Local Content and Government Procurement Authority (LCGPA) considers the local content score only as shown above; some private sector entities, depending on their internal procedures, have some additional items, such as export revenue.

The subcomponents C and part of D in the KSA's ICV formula relate to local content in labour compensations and capacity building, respectively, and are the ones relevant for our discussion in this section. Labour compensation includes two components: compensation of Saudi employees, which is considered 100% local content, and compensation of expatriate labour, which is considered 37% of wages calculated towards local content. The expenses permitted to be considered as part of "compensation" are salaries and wages, bonuses, commissions, overtime allowances, transportation allowance, housing and other allowances, end-of-service payments, and the entity's share in employee contributions towards pensions[4] (LCGPA, 2022).

The subcomponent D on capacity building includes various expenses, one of them being the training of Saudis. Expenses related to the training of Saudi nationals only, in the previous period, must be included here. Training activities in this subcomponent include all types of training, such as technical, technological, and leadership training. The training may take place at the entity's premises or outside. It also includes indirect training expenses, such as airfares, hotel accommodation, and daily sustenance allowance. Also included in the expenses are the costs of trainees (doing internships at the entity) and scholarships. If training expenses cover both Saudis and non-Saudis, only the expenses related to Saudi employees should be accounted for. The allocation of costs between the two groups should be based on suitable criteria, such as the number of employees or training hours (LCGPA, 2022).

Oman and the GCC – Cross-Country Summary

After having understood the ICV score formulae and models used across the four GCC countries, some characteristics become evident, i.e. pertaining to the emphasis on employee compensation(s) and spending on the training, development, and capacity building of employees, particularly nationals. In Oman, the ICV model focuses on increasing Omanization, enhancing training, and raising local procurement and spending in the country. The workforce component goal is to increase the employment of Omanis and develop the skills of the national workforce, and for this purpose the companies are required to report on the salaries paid to Omanis and expatriates, in addition to the 1.2% required spending on training for the winning bidder. In the UAE, the objective is to strategically upskill and develop local talent, and the greater focus is on the compensation

4. Expenses that are excluded are as follows: external manpower, end-of-service provisions, healthcare expenses, trainee remuneration, Saudi training expenses, in-Kingdom supplier development expenses, in-Kingdom R&D expenses, general accounting provisions for employee bonuses, and board of directors' fees.

paid to Emiratis. In Qatar, the focus is on spending on workforce training activities rather than just salaries and compensation, with an emphasis on specifying the type of training provided. Saudi Arabia's workforce component objective is to increase local procurement and spending in the country; whilst the focus is on the salaries of Saudi nationals, the emphasis is more on higher-level white-collar jobs and the specific training to build capacity at higher executive level for Saudi nationals. Though all countries in the GCC have similar contexts and emphasis on workforce nationalization, there are still some differences across them in terms of the specific focus on workforce development and its impact on ICV goals. In terms of the emphasis placed on compensation of employees, we also observe a few differences. These have been summarized in Table 3.4 in terms of the emphasis on these components as evident in each country's respective model.

Table 3.4: Summary of emphasis on the compensation component in the GCC ICV scores

Country	Nationals' Compensation	Expatriate Compensation
Oman	High Importance: integral to Omanization policies; significant focus on training and development (at required percentages).	Lower Importance: goal is to reduce dependency.
UAE	High Importance: critical under Emiratization; substantial investment in nationals' training and development.	Moderate Importance: heavy reliance on expatriates for talent acquisition but focus more on nationals.
Qatar	Moderate Importance: Qatarization aims to increase Qatari employment; greater emphasis on training and development.	Lower Importance: focus is on training nationals to reduce reliance on expatriates.
KSA	Very High Importance: strong emphasis under Vision 2030 and Nitaqat; critical in ICV formula including compensation and development – especially at senior levels.	Lower Importance: the goal is to increase employment and development of Saudi nationals only.

Source: Compiled by the author

Oman and Other Countries Around the World

In this section, more countries from different continents are considered for a cross-country comparison on the focus of the workforce component of their ICV models. The ICV models of the countries selected have similar characteristics to the existing model in

Oman, and a significant proportion of the national economy in these countries relies on the oil & gas and minerals sector. In addition to the GCC countries, this section includes Angola, Brazil, Malaysia, Norway, and South Africa.

Table 3.5 presents a summary of the cross-country comparison. The nine countries in the table apply different labour policies. Nevertheless, all are aimed towards increasing the employment and upskilling of their nationals and maximizing the amount retained in the local economy. To achieve these objectives, different countries follow different approaches based on various factors such as unemployment, level of education (skilled/unskilled labour), demography, gross domestic product (GDP), regulations, and other economic factors. Two broad approaches (or their combination) are observed in the employment-related policies: (i) regulatory approaches – which are prescriptive in nature, mandating employment requirements and having strict compliance mechanisms; and (ii) facilitative approaches – which are more incentive-based and play a more supportive role in the development and employment of nationals. Typically, countries have set a minimum threshold for hiring local talent within their labour policies (Table 3.5). All countries have regulations and policies in place to mandate and/or support local talent. Some countries further define a minimum labour requirement, ranging between 15% and 80%, with Oman being at the pinnacle.

Initiatives to recruit and develop local talents are implemented through national regulations or an ICV programme. Table 3.5 shows the inclusion and level of national and expatriate compensation and the inclusion and level of training and development for both nationals and expatriates in the respective country's ICV score formula. Similarly to the cross-country comparison across the GCC countries, we observe that the fundamental focus is on the promotion of nationals' employment, upskilling and training them, and reducing the dependence on foreign employees. Although the selected countries strongly emphasize the training element of their nationals, one can observe some differences in their experiences: for example, in the oil & gas and mining sector in Norway, Malaysia, and South Africa. In Norway, international/foreign firms must allow employees of the state-owned oil company, Statoil, to participate in any internal training programmes at the company›s expense (Article 2 of the 1991 Model Training Agreements concerning Petroleum Activities). In Malaysia, contractors are required to train staff of the national oil company, Petronas, through on-the-job schemes or within their training institutions (Article 26 of the Petroleum Sharing Contracts). South Africa's Liquid Fuels Charter mandates licensees to contribute to the «Upstream Training Trust» (UTT) to fund skills development, including project funding, human capital development, workplace integration, student bursaries, tertiary-level support, and career awareness. In contrast, some countries like Angola offer non-mandatory incentives, such as tax deductions for financial contributions to human resource development in petroleum companies (IGF, 2018).

Table 3.5: Cross-country comparison of labour requirements and labour subcomponents in the ICV score models

No.	Country	Labour Requirements for ICVModel	Min. National Labour Requirement	Labour Subcomponent inclusion in the ICV (or local content policy) Model					References/Examples
				Employee Compensation (Nationals)	Employee Compensation (Expatriates)	Training & Development (Nationals)	Training & Development (Expatriates)	Capacity Building & Other Measures	
1	Angola	Gradual localization of workforce based on employee category. In 2010, the requirement was for 100% (unskilled employees), 80% (mid-level employees), and 80% (upper-level employees).	Varies with time	Yes (Mandatory quotas on local employment)	No	Yes, major focus alongside compensation	Limited	Specific financial and training requirements for employing Angolans	Angolanisation policies, Ministry of Petroleum
2	Brazil	Local employment is not covered since it is expected to increase organically as businesses prosper.	Not Applicable	Yes (PROMINP initiatives)	Limited (Focus on nationals)	Yes, supported under PROMINP policies	Limited	Policies supporting local workforce integration in oil and gas sectors	PROMINP, ANP regulations
3	Malaysia	Imposes a minimum requirement for local hires in the oil sector.	60%	Yes (PETRONAS Vendor Development Program)	Limited (Focus on Malaysians)	Yes, part of structured Vendor Development Program	Limited	PETRONAS' initiatives for local content and vendor development	PETRONAS Vendor Development Program
4	Norway	Strict rules for hiring of foreign employees - fundamentally for knowledge transfer.	Not Applicable	Yes (High focus on Norwegian employment)	Yes, but very limited	Yes, including mandatory training and skill development programs	Focus on knowledge transfer	Emphasis on technology transfer, R&D investment in the local workforce	Norwegian Petroleum Act, Local Content Policy
5	Oman	The government has set targets for hiring of Omani nationals in the Oil&Gas industry.	80%	Yes (Omanisation targets)	Very limited, at fixed percentages (e.g. 20% of expat salaries)	Yes, major focus-but, static required 1.2% to Injaz Oman training (not part of the formula)	Very limited	Capacity building through Omanisation quotas and initiatives	Ministry of Manpower, Omanisation Programs (Tashgheel), Vision 2040
6	Qatar	The ICV Policy is designed to create job opportunities for Qatari nationals	15%	Limited focus	No	Yes, primary focus (Qatarization)	Limited	Qatarization program focusing on increasing Qatari employment in the private and public sectors	Qatar National Vision 2030, Qatarization
7	Saudi Arabia	The government has set targets for hiring of Saudi nationals in the Oil&Gas industry	50%	Yes (Labour component in ICV formula)	Very limited, at fixed percentages (e.g. 37% of expat salaries)	Yes (Substantial investment, part of Nitaqat program)	No	Nitaqat program, strategic Saudi Vision 2030 initiatives focused on workforce skills	Nitaqat program, Saudi Vision 2030
8	South Africa	Localization by more inclusiveness of HDSA, e.g. by 2014 mining companies were required to have 40% HDSA occupy executive, senior, core & critical skills, middle, and junior management positions.	Varies with time (through levies)	Yes (Mining Charter requirements)	No	Yes, significant emphasis on skills development through levies	Limited	Mining Charter mandates, Skills Development Levies	Mining Charter, Department of Mineral Resources
9	UAE	The ICV Policy is designed to create job opportunities for Emirati nationals.	15%	Yes (Emiratisation quotas)	Very limited, at fixed percentages	Yes, significant focus within Emiratisation policies	Limited	Emiratisation initiatives, including training programs and financial incentives for employing nationals	Emiratisation policies

Challenges with Human Capital Development in the ICV Model and Score

Human capital development and Omanization are ongoing processes that are not free of challenges. Market experience and research indicate that the biggest challenge in Oman, in terms of HC and WD, is mismatches or misalignments between the various aspects of WD, between the different stakeholders, and at different levels of the process and/or implementation of policies.

Challenges Caused by "Mismatches"

Discrepancies are noticeable in regulatory details concerning the workforce, implementation methods, culturally influenced behaviours, and the varying treatment of local versus expatriate workers: for instance, the Omanization policy. While the government and Omani workforce view this policy as a tool for promoting and protecting the national workforce and reducing reliance on expatriates, private sector employers often see it as a coercive measure that is arbitrarily implemented. Factor changes in regulations, such as banning expatriates from certain roles, inconsistent enforcement, and preferential treatment for well-connected individuals, create an unpredictable and monopolized business environment (Al-Bahrani, 2021). Mismatches arising from these conditions can be categorized into three, as presented below. These have been summarized from the study of Lagger (2023),

1. Omanization is a well-established policy, but there may be a *mismatch with its regulatory details* (or implementation method). This has been observed through the following:

    i. the sudden Omanization of selected positions – and its enforcement only on non-influential groups/businesses;

    ii. the lack of a common government platform across all relevant ministries with inter-ministerial alignment and coherent information to complete businesses' and employee registration; and

    iii. high government protectionism for nationals results in extreme workforce imbalance. For example, there is a stated minimum wage for Omanis at various educational levels but no minimum wage for expatriates at all. There are strict termination policies for Omanis versus no regulation for expatriates (and if it does exist, it is typically not implemented).

2. Enforcement of labour regulations, mismatch between theoretical framework and practical execution, due to the following:

i. dominance of large prominent family businesses exerting power over ministries for visa clearances for expatriates beyond permitted quotas and thresholds;

ii. tokenized hiring of an unqualified and completely unrelated-to-the-profession Omani only to "prove" to the government authority that they must be replaced by the "right" expatriate.

iii. paper compliance or "skirting" the system by registering for one title, but taking services for another title, especially to beat the system and still hire foreigners.

3. *Cultural mismatch* between government efforts, private companies' objectives, and citizens' perceptions. This has been observed through the following:

i. some Omanis view government initiatives to view employment as a fundamental right;

ii. a lack of realistic performance appraisals that are matched with the actual career progress, increments, and promotions of Omanis. Currently, employees' progress is simply an annual routine taken for granted, which is not always aligned with actual career progression;

iii. some Omanis lack commitment (i.e. misuse training spending and development resources for a "quick switch" to a higher and/or more reputable company or even the public sector for a higher position).

While including the workforce or labour component in the ICV score is a positive step, several factors must be considered to evaluate whether it effectively measures and drives workforce development in Oman. Here are some aspects and potential improvements to consider.

Assessment of the Current Workforce Component in the ICV Score

Quantitative vs Qualitative Measures:

Issue: The current workforce component primarily focuses on quantitative metrics, such as the number of Omani employees versus expatriates, rather than evaluating the quality of workforce development initiatives. The current component also does not accurately capture workforce retained value. Whilst there is a required amount of 1.2% of the contract value to be dedicated to the training of Omanis, there is no consideration to measure the outcome of the training or the trained in terms of actually increasing the proficiency of the trained workforce.

Improvement: Incorporate qualitative measures, such as the quality and impact of training programmes, career progression opportunities, and employee satisfaction. Calculate economic impact with economic, labour, and money supplier reserve multipliers. Consider flexible training payments between 1.2% and 2.5% based on the Omani-to-expat ratio and the specific sector skills set.

Skill Matching and Development:

Issue: Simply increasing the number of Omanis employed does not address the need to align skills with market demands and ensure that employees are job-ready. Also, having salary scales dependent only on designations does not justify salary payments as "value-enhancing".

Improvement: Ensure that the workforce component includes metrics on skill development and alignment with industry needs, such as certifications, apprenticeships, and continuous professional development programmes. Align measurements of the individual across all platforms, i.e. from psychometric analyses and performance measures to upskilling or reskilling outcomes.

Challenges and Recommendations to Enhance Workforce Development

This section briefly lists the challenges regarding WD in the ICV policy and potential recommendations to address those challenges.

Alignment with Market Needs:

Challenge: Misalignment between the skills possessed by Omanis and the demands of the job market can hinder effective WD.

Recommendation: Conduct regular labour market studies to identify skill gaps and align training programmes with current and future industry demands. Accelerate the pace at which the training programmes can incorporate industry needs.

Quality of Education and Training:

Challenge: Current educational and vocational training programmes may not adequately prepare students for the workforce. The quality of the training centre, the trainer, and the programme is neither continually assessed nor benchmarked internationally.

Recommendation: Collaborate with educational institutions to update curricula and incorporate practical, hands-on training through internships and apprenticeships. Spread awareness about vocational training and apprenticeships starting in high school. Continually assess the overall training experience and create a feedback loop to improve quality.

Employer Engagement:

Challenge: Private sector employers may not be sufficiently incentivized to invest in workforce development.

Recommendation: Provide incentives for employers who invest in the training and development of their Omani workforce, such as tax benefits or enhanced ICV scoring.

Monitoring and Evaluation:

Challenge: There is a lack of robust mechanisms to track the effectiveness of workforce development initiatives.

Recommendation: Implement comprehensive monitoring and evaluation frameworks to assess the impact of workforce development programmes and make data-driven improvements. Monitor the accuracy and timeliness of national-level data, specifically at the NSCI.

Regulatory and Policy Support:

Challenge: Regulatory barriers, excessive bureaucracy, and inconsistent policy enforcement can hinder workforce development efforts. High quotas can lead to unrealistic expectations, causing companies to create more non-essential positions, and in extreme cases, these quotas may lead to inefficiencies, with "dummy" nationals employed on paper whilst the work is being carried out by a low-paid expatriate.

Recommendation: Streamline regulatory processes and ensure consistent enforcement of policies related to workforce development. Align national policies and Vision 2040 objectives with the practical objectives of the ICV initiatives. Accompany the "mandatory"' quotas with supply-side strategies (that actually work) to raise skill levels.

Cultural Considerations:

Challenge: Societal preferences for public sector employment can limit interest in private sector opportunities.

Recommendation: Launch awareness campaigns to promote the benefits of private sector careers and highlight successful examples of Omanis thriving in these roles – at school, college, and university levels and at training institutes.

Economic Diversification:

Challenge: Heavy reliance on the oil and gas sector limits opportunities for workforce development in other industries.

Recommendation: Either diversify the economy by supporting the growth of other sectors, such as technology, tourism, and manufacturing, to create a wider range of job opportunities or diversify the efforts spent in the oil and gas sector. That is, use the training and upskilling deployed in this sector to help enhance other sectors through knowledge transfer and innovative sharing of "lessons learnt" across different sectors.

Market Openness and Flexibility:

Challenge: There is heavy reliance on government-mandated procedures of selection, hiring, and development of employees, and an extremely regulated market giving rise to questionable ways of getting work done, especially by SMEs.

Recommendation: Allow for a flexible market and ease of conducting business. One way to create jobs could be the introduction of an online national marketplace offering a streamlined experience for digital services for talented freelancers, as required by companies in Oman.

Considering the challenges highlighted in this section, an important theme is apparent throughout the discussion – a lack of transparency at various levels and between stakeholders. Transparency in workforce-related initiatives is crucial for the success of ICV models like that of Oman. This was also highlighted in the Qatar Economic Forum (2023). Transparency enables monitoring and accountability, ensuring companies adhere to the workforce localization targets and other ICV requirements (World Bank, 2019). In fact, transparency will also help combat most, if not all, of the mismatches discussed earlier and foster trust among the various stakeholders, i.e. employees, employers, communities, the government, and foreign investors. This trust through high levels of transparency is essential for successfully implementing workforce policies and initiatives.

Chapter Summary

Chapter 3 investigates the significance of the workforce development component of In-Country Value (ICV) initiatives in fostering economic sustainability and creating employment opportunities in Oman. It emphasizes the strategic role of human capital in achieving economic diversification and moving towards a knowledge-based economy, as outlined in Oman's Vision 2040. The chapter also highlights how workforce nationalization, particularly through the Omanization policy, aims to shift reliance from expatriate labour to a skilled Omani workforce, thereby promoting economic growth and capacity building among nationals.

The chapter also provides a cross-country analysis of the workforce component of the ICV model, comparing Oman's approach with those of other GCC countries and selected international benchmarks. This analysis reveals varying emphases on employee compensation, training, and development across different regions to help in understanding how the workforce is factored into country models specific to their contexts and economic goals.

The chapter also outlines the challenges of mismatches in regulatory specifics, workforce implementation practices, and cultural behaviours between local and expatriate employees. It underscores the need to develop relevant skills, enhance education and training quality, and align workforce skills with market demands to achieve effective workforce development. Initiatives like the Tashgheel programme, targeted at improving employability and reducing unemployment, and the Tamkeen programme, focused on specialized training in the insurance sector, are explored for their role in supporting workforce development and Omanization.

In conclusion, the chapter identifies the importance of transparency and strategic alignment in workforce-related initiatives to ensure the success of ICV models. It presents practical recommendations to address the gaps in current workforce development efforts, emphasizing the need for regular labour market studies, improved regulatory support, and enhanced employer engagement to build a resilient and competitive workforce in Oman.

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Questions from Chapter 3:

In-County Value Pillar: Workforce

A. Multiple Choice Questions

1. What is the primary aim of In-Country Value (ICV) initiatives in Oman in term of workforce?

A. To reduce foreign investment

B. To enhance long-term economic sustainability and create employment opportunities

C. To increase oil production

D. To reduce the unemployment rate

2. Which national policy focuses on replacing expatriate workers with trained Omani citizens?

A. Saudization

B. Qatarization

C. Omanization

D. Emiratization

3. What are the two core tenets of the workforce nationalization strategy in Oman?

A. To reduce wages and cut workforce benefits

B. To enhance the employability of the national workforce and provide measures to assess the effectiveness of the nationalization strategy

C. To increase expatriate hiring and avoid local training

D. To reduce the number of expatriate workers and eliminate full-time employment

4. What does the Tamkeen program focus on in the insurance sector?

A. Replacing all employees with robots

B. Empowering Omani youth through customized training programs

C. Increasing company profits at the cost of employee benefits

D. Reducing the number of Omanis in senior positions

5. Which of the following is NOT part of the objectives of Tashgheel?

A. Enhance employability of Omanis

B. Create job opportunities in both public and private sectors

C. Reduce unemployment through targeted support and training

D. Increase oil exports

6. Which country ranks higher than Oman in the 2020 Knowledge Economy Index (KEI) among the GCC nations?

A. Saudi Arabia

B. Bahrain

C. Qatar

D. Kuwait

7. As of December 2023, what is the Omanization rate in the private sector?

A. 89%

B. 22%

C. 75%

D. 50%

8. What are the main components evaluated in the ICV matrix score?

A. Investment, Omanization, local sourcing of goods, and local sourcing of services

B. Only investment and local sourcing of services

C. Omanization and the number of expatriates

D. Training and development spending only

9. Which of the following factors is crucial for effective workforce development in the ICV model?

A. Increasing the number of expatriates

B. Reducing the minimum wage

C. Aligning skills with market demands and ensuring job readiness

D. Eliminating all training programs

10. What minimum wage is set for Omani part-time workers under the 2017 regulations?

A. RO 1 per hour

B. RO 2 per hour

C. RO 3 per hour

D. RO 4 per hour

B. Short Answer Questions

1. Explain the term "knowledge-based economy" (KBE) as defined by Powell and Snellman (2004).
2. What are the seven objectives of Oman's Vision 2040 for achieving a Knowledge-Based Economy (KBE)?
3. How does workforce nationalization (Omanization) contribute to economic growth and capacity-building in Oman?
4. What are the specific workforce components included in Qatar's and Oman's ICV score formulas, and how do the two compare in terms of their weighted importance to increasing ICV in their respective countries?
5. What are the primary goals of the Tashgheel National Employment Program?

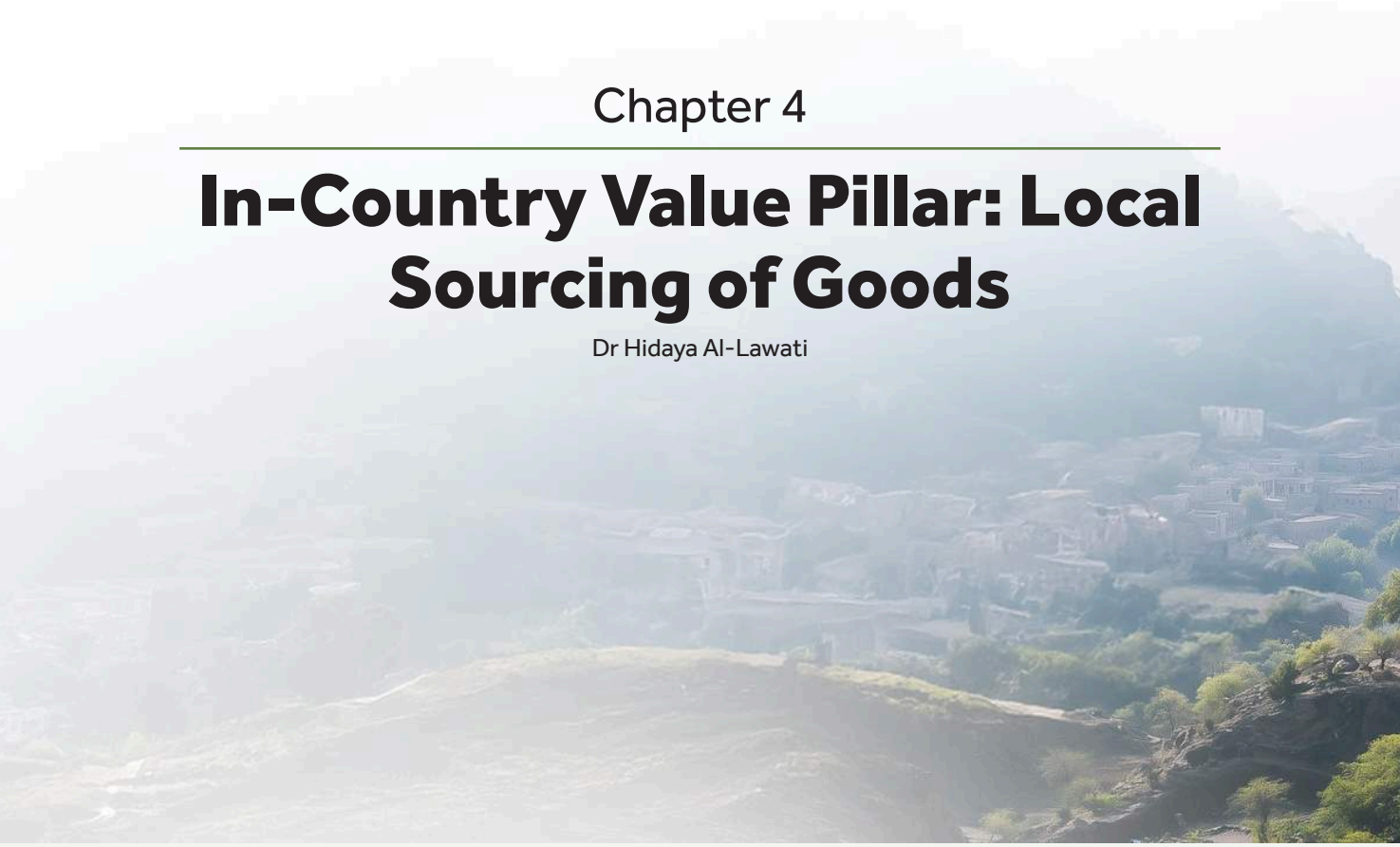
C. Essay Questions

1. Evaluate the effectiveness of the In-Country Value (ICV) initiatives in Oman in fostering economic diversification and sustainable growth. How do these initiatives contribute to the long-term vision outlined in Vision 2040? Use specific examples and data from the chapter to support your argument.
2. Compare and contrast the workforce nationalization strategies of Oman with those of other GCC countries (UAE, Qatar, and Saudi Arabia). What are the key similarities and differences, and how do these strategies reflect each country's unique economic objectives and challenges?
3. Discuss the challenges associated with human capital development in the ICV model of Oman. How do mismatches between regulatory specifics, implementation practices, and cultural behaviour's impact workforce development? Provide recommendations for improving alignment and addressing these challenges to enhance the effectiveness of Omanization and workforce development.

Chapter 4

In-Country Value Pillar: Local Sourcing of Goods

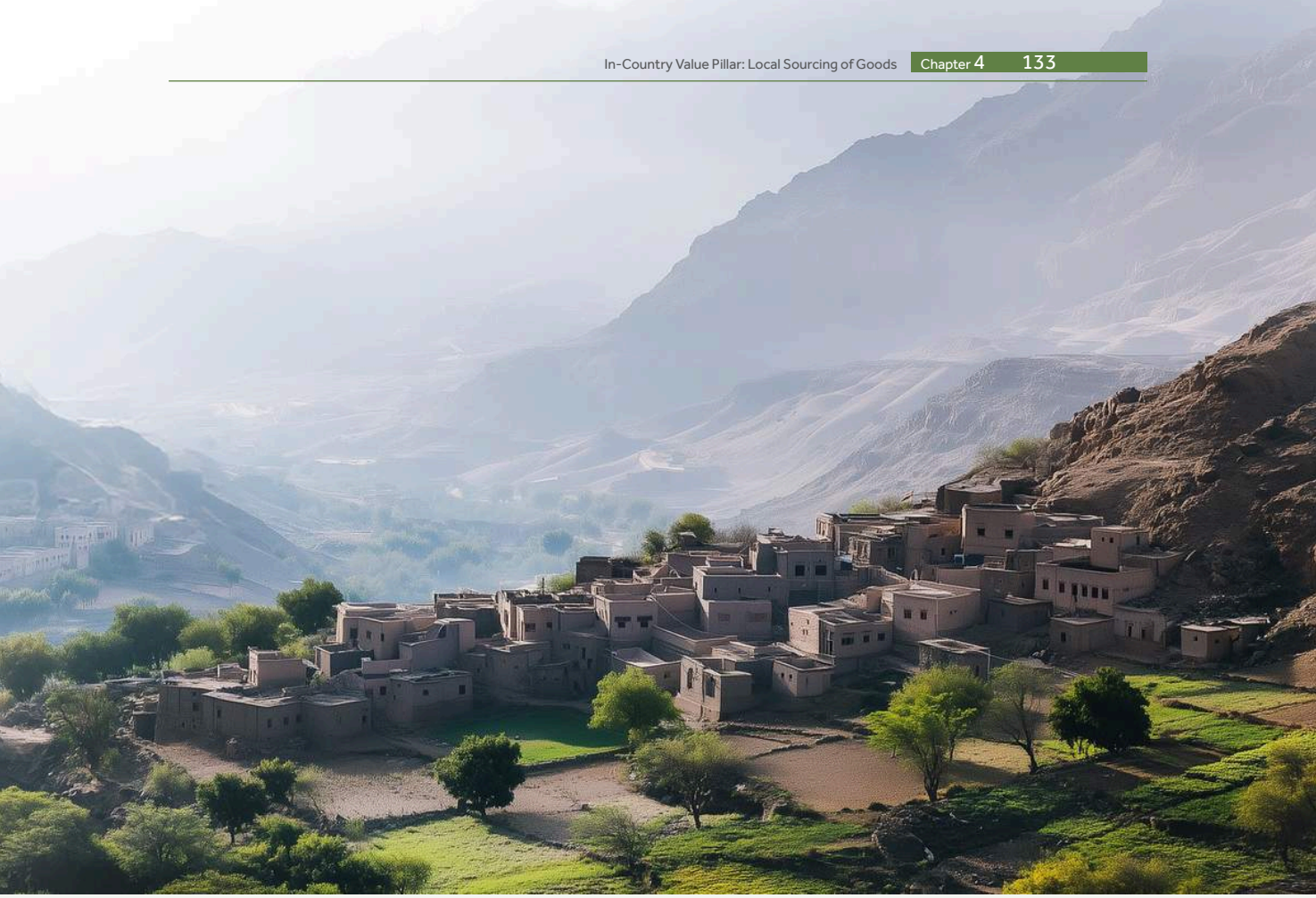
Dr Hidaya Al-Lawati



Abstract

The In-Country Value (ICV) framework is utilized worldwide to maximize the economic benefits of projects and activities to the local economy and minimize economic leakage resulting from importing goods from overseas. The ICV concept has been implemented to prompt companies operating in the country to generate jobs, nurture the local workforce and industries, and boost the economy by procuring goods and services locally. One of the fundamental pillars of ICV is sourcing goods and services (local procurement) from the local market, which significantly influences the national economy. Its impact manifests through various channels, affecting production, employment, trade, and overall economic stability. For example, PDO, the leading exploration and production company in the Sultanate of Oman, in line with the company's commitment to the ICV plan, has realized 81 opportunities during the last ten years with more than 70 contractors and awarded contracts with a value of $2.4 billion, secured more than 50,000opportunities for direct employment, and awarded direct contracts to local manufacturers worth approximately $1.75 billion over the last four years. In the Oman Shell's sustainability report, Shell states that in 2022, approximately 83.3% of the $41.5 billion expenditure on goods and services was sourced from local suppliers within the same country of operation..

Keywords:*ICV, local procurement, local market, local sourcing, Omanization*



Learning Objectives:

- To analyse the concept of local sourcing of goods (local procurement) and how it relates to a country's ICV policy.
- To evaluate the benefits of, and hurdles to, local sourcing of goods from both corporation and societal perspectives.
- To understand the Omani government's ICV strategy, emphasizing local sourcing of goods and regulations governing national and local products.
- To analyse the Vendor Registration System's benefits and functionality and how JSRS facilitates the buyer-supplier connection.
- To understand the contribution of local sourcing of goods to the ICV score.

Introduction

Local procurement, the practice of sourcing goods and services from within a specific geographical area, has emerged as a vital strategy for fostering economic development and resilience at the national level, especially by enforcing ICV requirements (Tordo *et al*., 2013). ICV policies mandate a minimum percentage of goods or services to be sourced domestically (this percentage varies from one country to another and sometimes from one company to another, depending on the exemption received from the ICV policy regulator). Ultimately, one of the primary aims of local sourcing of goods is to contribute to the nation's economic growth by supporting local businesses, fostering entrepreneurship and innovation, substituting domestically produced goods for imported goods, and creating more job opportunities for domestic labour.

Korinek and Ramdoo (2017) report that ICV policy and local sourcing of goods measures are particularly common in the oil and gas extractive sector. This is mainly due to the fact that the oil and gas sector is interconnected with various other sectors of the economy, and through strategic policies, it is possible to increase economic benefits beyond the oil and gas industry itself because such resources typically belong to the state, thus requiring to obtain licenses or concessions for exploration and extraction.

Governments often impose conditions, including ICV requirements, to ensure that exploiting non-renewable resources benefits the local economy. These measures help compensate for the extraction of state-owned resources by capturing some of the profits through royalties, job creation, increased business opportunities, and broader economic development. This approach is especially prevalent when foreign multinational firms, which are inclined to use imported inputs and foreign workers, undertake the exploration. Therefore, policymakers in resource-rich developing countries aim to maximize economic benefits from the extraction of exhaustible resources by crafting relevant ICV policies. A key focus is on enhancing the value added to local countries – the additional economic benefits generated by the extractive sector through interconnections with other industries. As a result, increasing local content has become a policy priority for many countries, both mature and new entrants to the extraction industry (Tordo *et al*., 2013).

ICV policies focus not only on an immediate boost in local content – such as raising the percentage of local employment or purchasing goods from a local supplier – but also on implementing actions that will promote sustained long-term positive effects in the local economy, such as developing skilled labour through capacity-building training programmes and the development of capable local suppliers. Furthermore, there is a spillover effect of the ICV policies in one sector to another sector or the whole economy. To elaborate on Brazil's local content policy reform case, the Brazilian government reformed the local content policies in the oil and gas sector, and this reform resulted in

massive benefits to the shipbuilding industry and enhanced household consumption. For example, the National Agency of Petroleum, Natural Gas and Biofuels (ANP) of Brazil expected 95,000 new jobs in shipyards due to local content policy reform in the oil and gas sector, and created jobs could lead to an additional USD1.76 billion in household consumption (Gourdon & Guilhoto, 2019).

Steward Redqueen's report (2018) titled "Unlocking the benefits of local sourcing for companies and society" highlights and discusses the benefits of, and hurdles to, local sourcing of goods. The following section briefly highlights these benefits and hurdles from the above report.

Benefits of Local Sourcing of Goods

Ideally, businesses would obtain the necessary inputs from local suppliers. Given that local sourcing offers various business advantages, it begs the question: why would a company choose the complexities of procuring materials from distant countries? Unless the local supply cannot fulfil a company's needs, there is little rationale for not sourcing locally (Steward Redqueen Report, 2018). Beyond the benefits to the purchasing company, local sourcing can also provide substantial developmental advantages to society (see Figure 4.1).

Figure 4.1 Benefits of local sourcing

COMPANY BENEFITS	SOCIETAL BENEFITS
Enhanced control	Household income
Increased flexibility	Business income
Reduced currency risk	Government income
Decreased environmental footprint	Employment
Connected customer base	Productive knowledge

Adopted from Steward Redqueen Report (2018)

Company Benefits from Local Sourcing

- Enhanced Supply Chain Control: When suppliers are situated near a company's location, it becomes easier to manage and monitor them to ensure that they meet deadlines and quality standards. Face-to-face meetings allow for clear explanations of supply chain demands and issues. Additionally, sourcing from local suppliers facilitates smoother communication and minimizes the risk of misunderstandings. Shorter local supply chains also improve transparency, which is vital for companies regarding compliance and in addressing customers' rising expectations for supply chain visibility.

- Increased Flexibility and Reduced Costs: By obtaining goods from local suppliers, companies can bypass the often costly and time-consuming process of customs clearance. Coupled with shorter transportation distances, this leads to reduced lead times for local suppliers compared to global ones, making local suppliers generally more responsive. This increased responsiveness enhances the flexibility of a company's supply chain, allowing for easier order modifications. Moreover, the logistics costs for locally sourced goods are usually much lower than those for imported ones due to the decreased need for stockpiling, the avoidance of import duties, and the shorter transportation distances. Additionally, shorter transport distances reduce the risk of goods damage during transit.
- Lowered Currency Risk: Companies mitigate financial risks tied to currency exchange rate fluctuations by sourcing from local suppliers who operate using the same currency. These fluctuations can vary significantly over the duration of a supplier contract and can greatly impact the prices of imported products. This is particularly crucial for companies operating in countries with unstable currencies, where exchange rate risks can be considerable.
- Decreased Environmental Footprint Related to Logistics: Local sourcing of goods allows companies to reduce transport-related carbon emissions. Transportation is a major global contributor to greenhouse gas (GHG) emissions, with air transport being particularly polluting. Companies can avoid these emissions by procuring goods from local suppliers, thus improving their sustainability. Additionally, companies that rely on local suppliers often maintain lower inventory levels, requiring less storage space compared to importing products, which further decreases their energy consumption.
- Connected Customer Base: One significant advantage of local sourcing of goods is that it can enhance a company's credibility and boost sales. In industries like mining and oil, companies are often criticized for not benefiting the local economy and sometimes even causing environmental and economic harm to communities. Local sourcing of goods can help generate the community support necessary to maintain their licence to operate. Additionally, businesses can leverage the growing consumer preference for local goods. They can appeal to a wider customer base by providing products made with local inputs.

Societal Benefit from Local Sourcing

- Source of Income for Households, Local Businesses, and Government: Procuring goods locally generates revenue for suppliers, which is then distributed among employees through salaries, the government through taxes, and businesses through profits. When procurement is done locally, these income streams stay within the country.

- Employment: By purchasing goods locally, companies contribute to job creation at local suppliers, as additional workers are needed to produce these goods. The number of jobs supported is highly dependent on the specific context, particularly the labour intensity of the procured goods. More labour-intensive goods tend to support more jobs compared to capital-intensive sectors. Additionally, if local suppliers obtain inputs from other domestic suppliers, significant "multiplier" effects can occur. This means that local sourcing creates ripple effects throughout the economy, supporting incomes and jobs among direct and indirect suppliers.
- Productive Knowledge: Local sourcing of goods can enhance a country's collective productive knowledge, which is a crucial driver for economic growth (Hausmann & Hidalgo, 2011). Countries advance by transitioning from producing basic products (like commodities) to more complex ones (such as machinery). This progression usually involves moving towards products related to existing production capabilities. Sourcing locally and collaborating with suppliers, especially multinational companies, can help boost a country towards manufacturing more complex products. These companies boost local capabilities by sharing their international expertise, technology, business practices, and managerial skills (Humphrey & Schmitz, 2001).

CASE STUDY 1: Virú Group - Empowering Local Communities through Sustainable Sourcing Practices

Company Overview:

Virú Group, one of Peru's leading agricultural exporters, boasts an expansive agricultural footprint across 8,000 hectares of land. In addition to its own cultivation, Virú collaborates with small-scale farmers to procure various fruits and vegetables for global distribution. Their product range includes staples like asparagus, artichokes, avocados, peppers, and mangoes, and value-added offerings such as pestos and ready-to-eat meals, catering to prominent supermarket chains like REWE, Carrefour, and EDEKA. The company sources fruits and vegetables from smallholder farmers and processes them locally before distributing the products globally. It collaborates closely with its 275 small-scale suppliers, supporting substantial local employment. Additionally, the company ensures compliance with ILO labour standards and provides training for employees, including occupational health and safety.

Commitment to Sustainability:

Virú's environmental stewardship is reflected in its water efficiency management

practices, with initiatives such as a water lily-based wastewater treatment plant championed through support from Deutsche Investitions (DEG). By adhering to international standards and employing cutting-edge production technologies, the company focuses on reducing emissions, chemical usage, and water consumption, securing certifications for its robust environmental and social management system.

Empowering Workforce & Local Communities:

Virú's holistic approach extends beyond production, with a focus on workforce development and community well-being. The permanent staff of over 7,500 employees undergo comprehensive training programmes encompassing technical and soft skills, contributing to higher skill levels and career advancement opportunities. Virú's CSR strategy includes providing essential benefits like transportation, medical facilities, childcare , and subsidized products to enhance employee well-being.

Economic Contributions & Local Partnerships:

Virú's sustainable business model ensures significant local economic impact, generating approximately EUR130 million in local income in 2017. These earnings not only support local livelihoods but also aid with government investments for community infrastructure development. By prioritizing local sourcing, Virú ensures that a network of 275 small suppliers aligns with international labour standards and undergoes relevant training sessions for compliance.

Export Growth & Innovation:

Virú's export-oriented production transcends borders, contributing to Peru's foreign exchange earnings and bolstering the country's current account balance. With expanding export markets in the US and Europe, and plans for new markets in Peru, Central America, and China, Virú demonstrates a robust diversification strategy driving success. Renowned for innovation in product development, advanced production technologies, and efficient logistical solutions, Virú remains at the forefront of Peru's agricultural sector.

Community Partnerships & Development Initiatives:

Virú actively engages with local communities through various social initiatives, investing EUR1.2 million annually to enhance livelihoods. Support for education, healthcare, and infrastructure development not only benefits local residents but also aligns with the company's strategic vision for sustainable community growth. By fostering open dialogue and addressing grievances through anonymous

mechanisms, Virú maintains transparent communication with employees and the public.

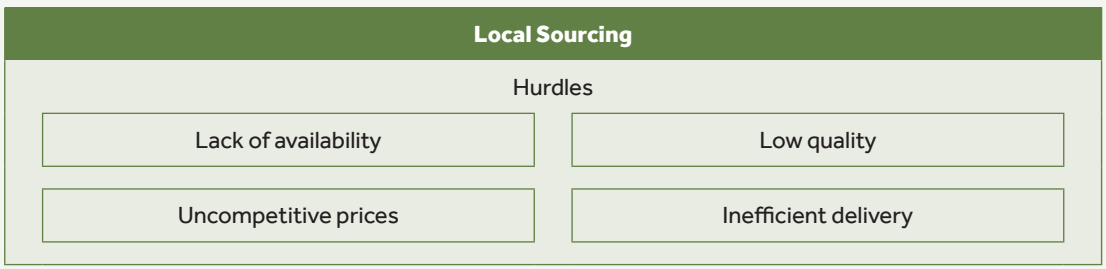
Virú Group's steadfast commitment to sustainable sourcing practices, community empowerment, and environmental conservation underscores its role as a key contributor to Peru's agricultural landscape. Through responsible business practices, diligent workforce development, and strategic partnerships with local communities, Virú embodies a holistic approach to business that paves the way for sustainable growth and positive social impact.

Source: https://www.deginvest.de/DEG-Documents-in-English/About-us/What-is-our-impact/EN_Case-Study_Viru_2018_final.pdf

Hurdles to Local Sourcing of Goods

The lack of local sourcing often indicates a mismatch between company demand and local economy supply, where products are either unavailable or do not meet company standards. Supplier selection literature identifies price, quality, and delivery as key procurement factors (Pal *et al*., 2013). When local suppliers fail to meet these criteria or when products are not locally available, companies tend to turn to international procurement, missing out on opportunities to benefit the domestic economy (see Figure 4.2).

Figure 4.2 Local sourcing hurdles



Adopted from Steward Redqueen Report (2018)

- Lack of Availability: The essential condition for local sourcing is the availability of the required goods locally. This availability hinges on various factors, one being the cumulative productive knowledge within a country. Countries with higher productive knowledge are more capable of producing diverse and complex products, thereby enhancing the availability of goods. Besides the lack of

productive knowledge, products might be unavailable because suppliers do not deem them financially viable or find it too risky to manufacture them locally. Local production of specific goods may require companies to venture into unfamiliar business areas, presenting high entry barriers. Geographical factors also play a crucial role, as certain products are only accessible in specific regions due to climatic or geographical conditions.

- Uncompetitive Prices: When selecting suppliers, companies primarily focus on the net price, which is influenced by various factors such as raw material costs, labour, transportation, research and development, profit margins, and market conditions. Firms that need capital-intensive or large-scale products may face more price-related challenges with local sourcing in developing economies than those requiring labour-intensive products. Labour costs in these economies are generally lower, favouring the local sourcing of labour-intensive goods. Conversely, capital-intensive products are often more expensive due to reduced capital productivity and technology levels. Additionally, smaller economies in developing countries lack the economies of scale to distribute fixed costs over a larger product volume, further impacting prices.

- Low Quality: Companies often prioritize the quality of goods when selecting suppliers, which is defined as meeting conformance requirements and fitness for use. Quality is crucial as companies must adhere to rising public and private standards to ensure consistent goods quality and avoid disruptions. Companies seeking high-quality goods may encounter challenges in sourcing locally from developing countries, where suppliers may struggle to meet quality standards due to limitations in terms of awareness, finances, skills, and knowledge.

- Inefficient Delivery: Companies also view delivery as a crucial factor, which involves a supplier's efficiency and effectiveness in aspects such as on-time delivery, short lead times, reliable delivery methods, appropriate packaging, and ensuring that products are delivered correctly and in good condition. Local sourcing of goods benefits from reduced logistical burdens, leading to improved supplier lead times, better supplier management, and enhanced control over product quality and quantity. However, companies needing sophisticated delivery services may find that the advantages of local sourcing could be offset by lower supplier efficiency and effectiveness resulting from limited investments. In more developed economies, supplier efficiency tends to be higher than in developing nations, meaning that despite longer distances, foreign suppliers may offer better delivery conditions than local ones.

ICV Policy in Oman: Foundation of Local Sourcing

In late 2013, the Omani government launched the ICV Blueprint Strategy to maximize the benefits derived from the country's petroleum resources. This strategy includes a series of policies aimed at enhancing local content within the Omani economy. Specific requirements were established for the oil and gas sector, focusing on seven key areas: investment in fixed assets, Omanization, training of Omanis, local procurement of goods, local subcontracting of services, development of national suppliers, and fostering national training, education, and research institutions. This chapter emphasizes local procurement of goods, with the other ICV elements being discussed in subsequent chapters (Oxford Business Group, 2016).

Furthermore, in 2023, the secretariat general of the tender board in Oman issued Decision 174/2023, a regulation that governs local content. The regulation defines both national and local products. National products are local products that received the "Made in Oman" label from the Ministry of Commerce, Industry, and Investment Promotion based on the Ministerial Decision no. 62/2023, while local goods are those made in the Sultanate of Oman. It is worth noting that not all local goods are national goods.

MCIIP has issued Ministerial Decision no. 62/2023 that regulates the local product's identity licensing. The ministerial decision aims to establish a unified national framework for Omani products, streamlining their marketing identity. Additionally, it seeks to boost competitiveness, increase the in-country added value (ICV) of national products, and promote awareness about Omani products. Article (3) of Ministerial Decision 62/2023 regulates that any national product (i.e. Made in Oman products) shall contain not less than 20% of local content. Once the licence is approved by the ministry, it is valid for three years and renewable after that. Also, the ministerial decision defines the calculation of local content percentage to approve the licence application of national products as follows:

$$\frac{\textit{((ex factory price of product)-(value of non originating materials)}}{\textit{(ex factory of price if product)}} \textit{ x 100}$$

In addition, in 2023, the General Secretariat of the Tender Board, in cooperation with the Ministry of Commerce, Industry, and Investment Promotion, launched a mandatory list of national product initiative to achieve one of the ICV programme elements: local sourcing of goods and services. This list, which will be updated regularly, consists of items and services that must be purchased via local companies. The current mandatory list of

national products includes nine categories of products for 57 commodities, including building materials, electrical materials, oil equipment, iron materials, foodstuffs, plastic products and tools.

As an example, the Oman Investment Authority (OIA), the investment arm of the Sultanate of Oman, created a mandatory list using the following methodology. The OIA's mandatory list includes services and products that OIA companies are required to purchase and supply from local companies.

1. **Supply Chain Analysis**: The ringfencing list of products and services is collected from OIA entities. The items are cross-checked with the Ministry of Commerce, Industry, and Investment Promotion's mandatory list.
2. **Market Research:** OIA entities should ensure that there are at least three local suppliers/companies available in the market.
3. **Engagement:** Engage with OIA entities and key stakeholders to decide which products and services can be ringfenced and ensure their availability.
4. **Preparation and Planning:** The OIA ICV team and Rawabat reviews the companies' procurement lists to determine whether the products are made in Oman or if local suppliers of goods and services are available.
5. **Implementation:** The current ringfencing list will be implemented among OIA entities.
6. **Updating the list:** The mandatory list is updated regularly.

The methodology of the selection process for products on the OIA mandatory list of national products contributes to enhancing competitiveness and supporting the local market by ensuring that products that must be purchased from local companies are included on the list. This process promotes the purchase of goods from local suppliers, stimulating the local economy, supporting local businesses, and ultimately contributing to the development and growth of the domestic market. Additionally, by requiring high-quality standards and regular monitoring of performance, the selection process ensures that local products and services are of top quality, thus enhancing competitiveness both domestically and potentially in international markets (OIA, 2023).

Vendor Registration System

The vendor registration system is an enabler of the local sourcing component of the ICV plan. It allows operating companies to connect to suppliers (local or international) for procurement opportunities. The system aims to create a network of reliable and

certified suppliers that the operating companies can easily access. Therefore, the vendor registration system enhances the suppliers' visibility and provides potential procurement opportunities from local suppliers. In addition, the vendor registration system is a system by which supply chains can be managed due to centralized decision-making and constant information sharing among various parties.

In 2014, the Ministry of Energy and Minerals, along with oil and gas operating companies, created the Joint Supplier Registration System (JSRS) as a key driver of Oman's ICV strategy to connect suppliers to procurement opportunities in the country's oil and gas and other industries. The purpose of the JSRS is to serve as a mandatory supplier registration and certification system for suppliers (both local and international) wanting to connect with Oman's oil & gas and other key industries. It benefits suppliers by providing them with access to procurement opportunities, facilitating partnerships, and allowing them to showcase their products and services to potential buyers.

The JSRS consists of a network of certified suppliers, including micro, small, and medium enterprises (SMEs), local community contractors (LCC), and large suppliers, who are available for instant connectivity by buyers. The system includes the JSRS Contracts Management System, the Supplier Profile Management System, and a platform for business-to-business interactions. The advantages of the JSRS include access to market intelligence reports, subscription to open tenders across GCC countries, and the opportunity to apply for additional certifications specific to certain buyers. The system fosters spending transparency across strategic projects and supports operational and strategic procurement operations (Business Gateways International, 2014).

In addition, the system has created the JSRS Certified Suppliers Network (JSRS CSN) for certified suppliers. Suppliers automatically join the JSRS CSN after undergoing a strict validation process. The following flow chart describes the certification process (see Figure 4.3).

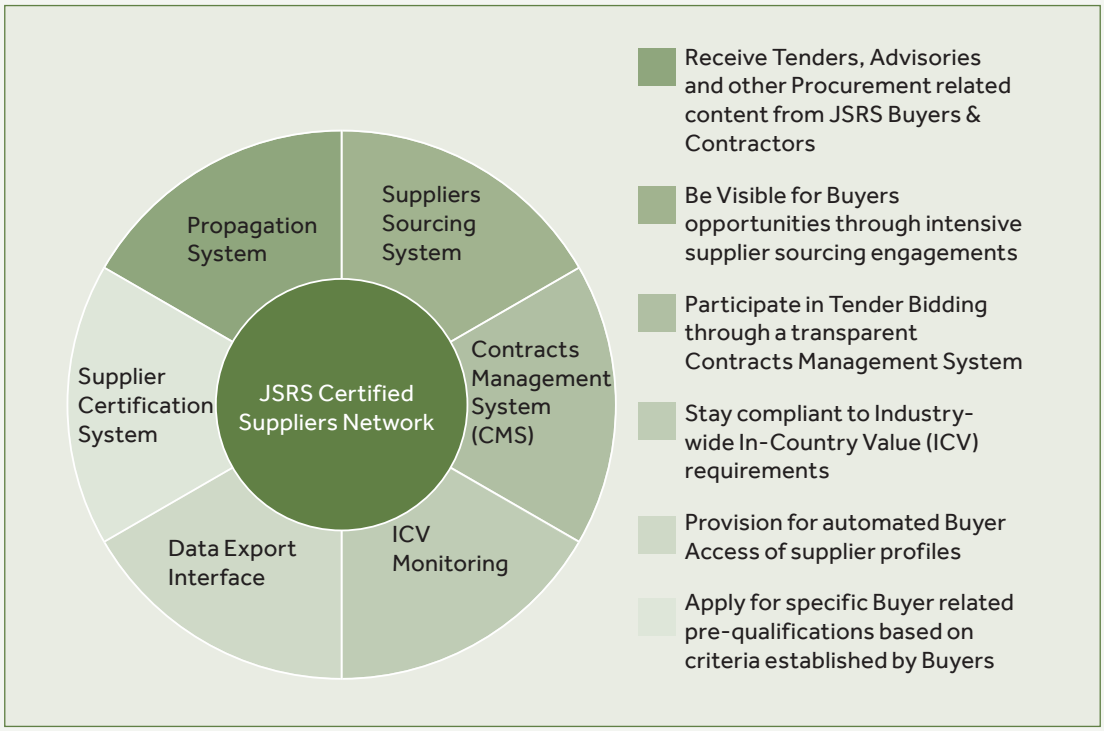
Figure 4.3: JSRS certification process



Source: https://mem.gov.om/en-us/MEM-Initiatives/JSRS

Engaging operating companies with suppliers in the JSRS is mutually beneficial for both operators and suppliers. From the operating companies' perspective, such a system enhances the credibility of the suppliers and provides a learning experience for suppliers to play an active role in local procurement activities. In addition, as an enabler of the ICV strategy, the creation of the JSRS by the Ministry of Energy and Minerals enhances the local sourcing of goods (local procurement) and reduces or patches economic leakage, where economic benefits generated by a project or industry stay within the country and do not flow out of the country to other countries. The following illustration shows potential engagement between operators (buyers) and suppliers in the JSRS (see Figure 4.4).

Figure 4.4: JSRS suppliers networks in Oman



Source: JSRS brochure avalable at: www.businessgateways.com

Classification of Suppliers

In Oman, suppliers can be classified into three categories based on their country of incorporation, their role in supplying goods as agents in the local market, and the production of goods labelled "Made in Oman".

- **Made in Oman:** This refers to local suppliers of products, materials, or equipment listed as originating from Oman by MCIIP.
- **Nationally Registered Supplier:** This is a supplier incorporated under Omani law, including companies, subsidiaries, or branches registered to operate in Oman with a renewable licence. Their offices or facilities related to manufacturing, assembly, or service provision must be in Oman.
- **Foreign Registered Supplier:** This term denotes a supplier that is a company, subsidiary, or branch not incorporated under Omani law and not registered to operate in Oman with a renewable licence.

To calculate the amount that should contribute to the ICV score,[1] it is essential to differentiate the origin of goods supplied by a local supplier labelled "Made in Oman", a nationally registered supplier, or a foreign registered supplier. For example, "Made in Oman" goods can be measured as follows:

Total $ value paid for "Made in Oman" goods/total $ value paid for all goodsx 20%[2]

Example: An ABC contractor submitted an ICV plan for a $10 million good, and the plan stated that a proportion of such goods was Made in Oman valued at $3 million or 30%, 50% of goods were purchased from nationally registered suppliers, and the remaining 20% from a foreign registered supplier. The company's ICV plan matrix gives 60% element weight to Made in Oman goods, 30% for nationally registered supplier goods, and 10% for foreign registered supplier goods. Calculate the amount that contributes to the ICV score for the Made in Oman goods.

First, total goods will be multiplied by the ratio of total anticipated expenditure on Made in Oman goods to total goods, then multiplied by the proportion of spend on Made in Oman goods assumed to be retained in Oman, which is usually 20% (Ministerial Decision 62/2023). Finally, all figures will be multiplied by the company's ICV plan matrix (Table 4.1).

Table 4.1: ICV local sourcing of goods ICV plan

ABC Contractor ICV Plan for Good	Locally Sourced goods (Made in Oman)	Proportion of Made in Oman	Retained in Oman Requirement (Ministerial Decision 62/2023)	Direct Made in Oman
$10,000,000	$3,000,000	30%	20%	$600,000

Then, all figures will be multiplied by the company's ICV plan matrix and reported in the company ICV score (Table 4.2).

1. Note that the ICV score formula is based on four main components (not only goods), namely: Investment in Fixed Asset, Nationalization of Workforce, Local Procurement (local sourcing of goods), and Local sourcing of Services.
2. Ministerial Decision no. 62/2023 regulates the Made in Oman licence. Article 3 states that any Made in Oman products shall contain at least 20% local content.

Table 4.2: ICV local sourcing of goods ICV plan calculation

Made in Oman	Nationally Registered Supplier	Foreign Registered Supplier
$600,000	$5,000,000	$2,000,000
60%	30%	10%
$360,000	**$1,500,000**	**$200,000**

*Please note that in the above example, (30%*80%) 24% of $10 million or $2.4 million is the value of Made in Oman goods that are not retained in the country.*

In theory, local goods should contribute 100% to the ICV score based on the notion that these local goods are made domestically, from local raw materials, and by local labour. For instance, the Oman Investment Authority (OIA) counts 100% of the amount paid for Made in Oman goods towards the ICV score. However, this assumption might not be valid as some raw materials are imported from overseas countries, and some parts of production occur in overseas countries. For example, a locally made interior paint for a building might contain 30% local raw materials (calcium carbonate/soda flakes/marble powder) and 55% imported raw materials (antifoaming agents).[3] Therefore, as ICV is a context-based plan, some countries or companies assign a predetermined element weight to each category of goods (for example, 60% for Made in Oman goods, 30% for nationally registered supplier goods, and 10% for foreign registered supplier goods). However, these element weights are subjective and do not indicate the exact amount of local raw materials used in the final product.

Local Sourcing of Goods and the Value Chain

The requirement for goods varies along the value chain at various stages. At each stage, different inputs (goods) are utilized; thus, the potential for enhancing local content can vary significantly along different stages of the value chain (Tordo *et al.*, 2013). For example, the presence of different stages within the oil and gas sector's value chain can provide opportunities for local content enhancement by allowing local suppliers to participate in various aspects of the industry (exploration, development, production, etc.). However, the level of local suppliers' participation in sourcing local goods at each stage (exploration, development, production, etc.) varies depending on the local economy's level of development and industrialization. Figure 4.6 (adopted from Tordo, 2011) shows the typical goods and services utilization in the oil and gas industry at the various stages of the production chain.

3. Example from RABT platform.

Figure 4.5: Goods and services typical ICV in oil and gas based on World Bank



Source: Tordo (2011) from World Bank Data

The following describes the three major stages of the value chain in the oil and gas industry:

Suitable sedimentary basins for oil and gas exploration are initially identified using straightforward techniques such as aerial and satellite imagery, alongside magnetic surveys. More detailed insights into specific sites are acquired through costly seismic surveys, whose data are processed through advanced computer analysis to produce images of geological formations and potential hydrocarbon deposits. The next step involves exploratory drilling with rigs designed for the specific environment (land, shallow water, or deep water). This stage, which involves various ancillary equipment and services, is often outsourced to specialized service companies. Newly discovered oil regions typically lack domestic capacity to supply these specialized inputs, although there is some demand for unskilled services and basic construction, which are minimal due to the limited scale of exploration activities.

When hydrocarbons are found in viable quantities, the development phase begins with drilling appraisal wells to assess the size and commercial potential of the find. This phase is also specialized and small in scale, limiting local content. Similarly to exploration, if the discovery is not economically viable, activities cease, and any local content created would be short-lived. Consequently, local firms are cautious about investing in exploration and development until there is a clear indication of economically recoverable oil.

The production phase follows the development phase, involving full-scale drilling and constructing infrastructure to connect wells to processing facilities or evacuation routes. Onshore infrastructure is typically less complex and cheaper than offshore infrastructure. The speed at which reservoir pressure pushes petroleum to the surface, known as the flow rate, depends on reservoir characteristics, including rock properties and oil viscosity. Natural pressure typically recovers less than 50% of oil and 75% of gas. To enhance flow rates and recovery, secondary methods like water or gas injection and surface-mounted or submersible pumps are used. Tertiary methods, or Enhanced Oil Recovery (EOR), employ advanced techniques to modify the oil's properties.

Source: Tordo (2011)

As described in the oil and gas industry's example, the utilization of local goods differs at different stages of the value chain (production chain in the above example). One of the hurdles to the local sourcing of goods in the ICV strategy is whether the local economy is developed enough and industrialized enough to source and support each stage of the value chain locally.

Comparison of Local Sourcing of Goods

The ICV strategy is context-based, and each country has its own ICV strategy that guides its local content requirements based on the country's strategic priorities. For example, the nationalization of employment is a strategic priority for Oman, but it might not be a priority for other countries. Hence, the success of the ICV strategy relies significantly on comprehensive and well-studied policies. These policies should target market shortcomings, enhance the economy overall, and align with the ICV's strategic goals. Consequently, each country tailors its ICV strategy to its unique perspective, adopting varied policy approaches. As priorities differ between countries, ICV policy requirements are also different. Table 4.3 highlights some of the key requirements for local sourcing of goods in various countries' ICV strategies. These countries vary in utilizing local sourcing of goods depending on countries' national and strategic priorities.

Table 4.3: Goods ICV requirements

Country	Local Sourcing of Goods Requirement
Oman	Made in Oman products shall contain at least 20% local content. Targeted policies are in place to encourage local procurement of goods.
UAE	Targeted policies are in place to encourage local procurement of goods.
KSA	Targeted policies are in place to encourage local procurement of goods.
Norway	Licensees must use Norwegian vendors to acquire goods and services.
Malaysia	At least 30% of goods and services need to be resourced locally.
Brazil	Minimum local procurement is revised periodically and is mandatory for the bidding process. In the oil sector, the minimum requirement depends on the stage of the project.
Mozambique	Preferential treatment is given to the purchase of local goods and services "[w]hen such goods and services match international standards in terms of quality, availability, and required quantity, and are priced, including taxes, no more than 10% above the cost of comparable imported goods".
Indonesia	Targeted policies are in place to encourage local procurement of goods.
Kazakhstan	Minimum commitment levels of local content in goods are required for bids for new subsurface mineral rights.

Source: Local Value Creation, Part 2 Integrating Localisation into Public Sector Procurement

Chapter Summary

This chapter explores the role of local sourcing of goods in maximizing economic benefits and minimizing economic leakage within the ICV framework. The ICV concept promotes local procurement, job creation, workforce development, and economic stability by sourcing goods and services locally. For instance, Petroleum Development Oman (PDO) has significantly contributed to local procurement and job creation. Benefits of local sourcing have been discussed, such as the enhanced supply chain control, increased flexibility, reduced costs, and a decreased environmental footprint. It also boosts the local economy through job creation and income generation. However, hurdles such as a lack of availability, uncompetitive prices, low quality, and inefficient delivery often challenge local sourcing. The chapter also discusses Oman's ICV policies and the vendor registration system that supports local procurement. The chapter includes several case studies illustrating the impact and challenges of local sourcing within the ICV framework.

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Keywords Index:

A
ABC contractor
ANP
Appraisal wells
Availability of goods

B
BNDES
Brazil
Brazilian GDP
Brazilian Local Content Policy
Building materials
Business Gateways International

C
Calcium Carbonate
Capital-intensive products
Virú Group
Brazil's Local Content Policy
Certification Process
Channel of Policy
Connected Customer Base
Conformance requirements
Conselho Nacional de Politica Energetica
Concessional financing
Cumulative productive knowledge
Currency Risk

D
Decision 174/2023
Decreased Environmental Footprint
Delivery efficiency
Development
Domestic market

E
Economic Contributions
Economic growth
Enhanced supply chain control
Enhanced flexibility
Environmental stewardship
Exploration
Export-oriented production

F
Federal tax exemption regime (REPERTO)
Fixed assets
Foreign Registered Supplier

G
General Secretariat of the Tender Board
Geology
Goods calculation for ICV score
Greenhouse gas emissions
Gross revenues

H
Hausmann and Hidalgo
Hurdles to Local Sourcing of Goods
Humphrey and Schmitz

I
Import duties
Industrial sector
Inefficient Delivery
Innovation
Institutional responsibilities
Intellectual Property
ICV (In-Country Value)
ICV Blueprint Strategy
ICV plan matrix
Investment in fixed assets

J
Job creation
JSRS)
JSRS CSN

K
Kazakhstan
Key policy elements
Korinek and Ramdoo

L
Lack of productive knowledge
Labour costs
Labour intensity
Lead times
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Local Community Contractors (LCC)
Local content
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Local Content Policies
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Local market
Local Procurement
Local raw materials
Local suppliers
Logistics
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M
Made in Oman
Malaysia
Market conditions
Market intelligence reports
Market research
Merchant Marine Fund
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Monitoring activities
Mozambique
Multinational firms

N
National product's identity licensing
National suppliers
Nationalisation of employment
Nationally Registered Supplier
Natural resources
Net price
Norway

O
Oil and gas sector
Oman Investment Authority (OIA)
Omanisation
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OxfordBusinessGroup

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Petrobras
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Policy tools
Pricing challenges
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Productive Knowledge
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PROMINP
Progredir

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R
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Reduced costs
Reduced lead times
Reduced logistics burdens
Regulatory activities
Renewable license
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Revenue streams
Ring-fencing list
Ripple effects

S
SABRESABRE
Secondary recovery methods
Sedimentary basins
Service sector
Shipbuilding industry
Short lead times
Shorter transportation distances
Skills and knowledge
Social security system (COFINS)
Sourcing challenges
Sourcing of goods and services
Spillover effect
Stakeholders
Steward Redqueen
Strategic policies
Sub-surface resources
Suppliers Network
Supply Chain Analysis
Supply chains

T
Targeted policies
Tax exemption
Technology levels
Tender Board
Tertiary recovery methods
Total value paid for goods
Trade agreements
Training of Omanis
Transportation costs

U
UAE
Uncompetitive prices
Universal coverage
Unsourced goods
Updating the list

V
Vendor Registration System
Virú Group
Value chain
Value of goods

W
Workforce development



Questions from Chapter 4

In-County Value Pillar: Local Sourcing of Goods

A. Multiple choice questions:

1. What is the primary purpose of local procurement?

A. To reduce government expenditure

B. To promote global trade

C. To foster economic development and resilience

D. To increase dependency on imported goods

2. How do ICV (In-Country Value) policies impact local businesses?

A. They decrease job opportunities

B. They support local businesses and entrepreneurship

C. They promote the outsourcing of services

D. They reduce domestic labour involvement

3. Why are ICV policies and local sourcing particularly common in the oil and gas extractive sector?

A. Because the oil and gas sector is not interconnected with other sectors

B. Because sub-soil resources typically belong to the state, requiring firms to obtain licenses or concessions and ICV requirements are to ensure that exploiting non-renewable resources benefits the local economy

C. Because the oil and gas sector always uses domestic inputs

D. Because it does not require strategic policies to amplify economic benefits

4. What is one of the long-term effects of implementing ICV policies?

A. Developing skilled labour through capacity-building training programs

B. Immediate reduction in foreign investments

C. Decreasing local business opportunities

D. Reducing household consumption

5. What is a significant environmental benefit of local sourcing of goods?

A. Increased reliance on air transport

B. Higher inventory levels requiring more storage space

C. An increase in overall energy consumption

D. Reduction in transport-related carbon emissions

6. How does local sourcing of goods contribute to a country's transition from basic to more complex products?

A. By focusing solely on commodity production

B. By decreasing collaboration with multinational companies

C. By leveraging existing production capabilities and collaborating with multinational companies to enhance local capabilities

D. By avoiding the integration of international expertise and technology

7. Which factor presents a significant challenge for local sourcing of capital-intensive products in developing economies?

A. Lower capital productivity and technology levels

B. Relatively low labour costs

C. The abundance of raw materials

D. High market conditions for labour-intensive products

8. The primary purpose of the Joint Supplier Registration System (JSRS) created by the Ministry of Energy and Minerals in Oman?

A. To limit procurement opportunities to local suppliers only

B. To reduce the visibility of suppliers in the market

C. To serve as a mandatory supplier registration and certification system for suppliers wanting to connect with Oman's Oil & Gas and other key industries

D. To manage inventory levels for oil and gas companies

9. How does the JSRS benefit suppliers?

A. By decreasing access to procurement opportunities

B. By providing access to procurement opportunities, facilitating partnerships, and allowing suppliers to showcase their products and services

C. By excluding Micro, Small & Medium Enterprises (SMEs) from the system

D. By increasing the reliance on international suppliers only

10. How does the potential for local content enhancement vary along the oil and gas sector's value chain?

A. It is consistently high across all stages without variation

B. It varies depending on the stage of the value chain and the local economy's level of development and industrialisation

C. It is independent of the local economy's development

D. It is lowest during the exploration stage regardless of other factors

B. Short Answer Questions:

1. Why might a company choose to procure materials from distant countries despite the advantages of local sourcing?

2. Critically discuss the benefits of local sourcing of goods to corporations and society.

3. What are the primary factors that drive companies to opt for international procurement over local sourcing, and how do these factors relate to the mismatch between local supply and company demand?

4. Explain the differences between "Made in Oman Good Suppliers," "Nationally Registered Suppliers," and "Foreign Registered Suppliers" in Oman?

5. How does the actual contribution of "Made in Oman" goods to the ICV score potentially differ from the theoretical 100% contribution, and what challenges does this present for accurately measuring local content?

C. Long Answer Questions:

1. Discuss the importance of tailoring ICV strategies to each country's unique perspective and strategic priorities. How do well-studied policies targeting market shortcomings contribute to the success of ICV strategies, and why is it crucial for ICV policies to align with strategic goals?

2. How can imposing mandatory targets for procurement, without proper local capacity, impact economic sectors such as mining, and what are some potential unintended consequences of preferential treatment policies?

A. Case Studies

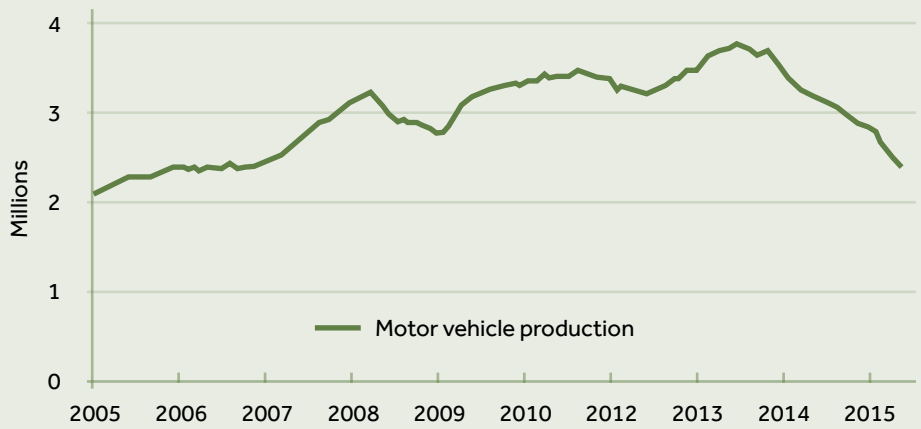
CASE STUDY 1: Brazil: A tale of two industries or how openness to trade matter [1]

By Jens Arnold

Senior Economist, Head of the Brazil Desk, OECD Economics Department

Brazil's industrial sector is vast and varied, with some segments thriving while others struggle due to limited integration into the global economy. The automotive and aircraft industries illustrate these differences: the former is predominantly inward-looking, while the latter is well-integrated into global trade. Brazil ranks as the seventh-largest automobile producer globally but faces significant challenges, leading to a decline in production. The automotive sector is heavily shielded from foreign competition, focusing primarily on the domestic market and local content, with only 15% of its production exported. Despite being the eighth-largest car producer worldwide, Brazil is only 24th in automotive exports. Additionally, Brazilian vehicle exports have one of the lowest foreign value-added contents among 62 countries in the OECD-WTO Trade in Value Added database (OECD, 2015a).

Figure 1. Production of motor vehicles, in million units, accumulated over 12 months

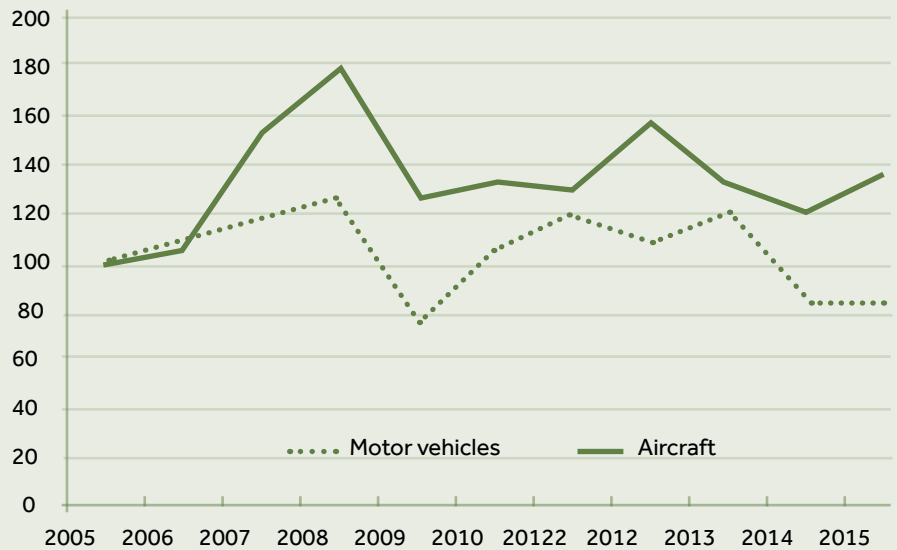


Source: available at http://www.anfavea.com.br/tabelasnovo.html

1. Adopted: Arnold, J. (2016), Brazil: A tale of two industries or how openness to trade matters, https://oecdecoscope.blog/2016/03/22/brazil-a-tale-of-two-industries-or-how-openness-to-trade-matters/ (accessed on June 2024).

While numerous international manufacturers have established production facilities in Brazil due to the attractive long-term potential of its consumer market, most have not integrated their Brazilian operations into global value chains (OECD, 2015b). This limited exposure to foreign competition has contributed to a significant lag in productivity compared to Mexican car manufacturers, who are fully integrated into global production networks and have seen significant gains in market share. For instance, Mexican plants produce 53 cars per worker annually, compared to only 27 in Brazil, despite producing smaller models.In contrast, Brazil's aircraft industry tells a different story. Given the smaller production volumes, economies of scale necessitate a focus on the global market. Embraer, founded as a state-owned company in 1969 and privatized in the 1990s, has become a leading global player. Initially, Embraer relied heavily on international component procurement for final assembly in Brazil but has since begun producing some parts in-house. Consequently, Embraer remains highly integrated into global production chains, with imports accounting for 70% of its value added. Embraer's exports have consistently outperformed those of motor vehicles, making it the world's third-largest aircraft producer and the leader in the 70-130 seat segment, accounting for 60% of global deliveries.

Figure 2. Brazil: Exports of motor vehicles and aircraft, 2005=100, in USD



Source: Ministry of Development, Industry and Foreign Trade, Brazil.

Source :OECD-WTO (2015a). OECD-WTO Trade in Value Added (TiVA) database and OECD (2015b). OECD 2015 Economic Survey of Brazil, OECD Publishing, Paris

*There is no specific answer for case analysis, and students are required to analyze the cases critically and do some background research about them.

Questions:

1. Discuss the strategic shift in Embraer's production model over the years from relying heavily on international component sourcing to gradually increasing in-house production. How has this transition impacted Embraer's position in the global aircraft manufacturing sector, particularly in terms of value addition and market competitiveness?

2. Compare and contrast the business strategies of Brazil's automotive sector, which is more domestically focused, with the aircraft sector, which is deeply integrated into global trade. Analyze the key factors contributing to the success of Embraer in becoming one of the top players in the global aircraft industry, especially considering its strong reliance on imports for value addition.

3. Examine the role of privatisation in the transformation of Embraer from a state-owned entity to a global leader in aircraft manufacturing. How has privatisation influenced Embraer's competitiveness, innovation, and ability to adapt to the demands of the global market? Discuss the implications of Embraer's success for Brazil's broader industrial sector and its positioning in the global manufacturing landscape.

Case Study 2: LCRs related to India's domestic solar industry[1]

The National Solar Mission (NSM), initiated by the Prime Minister on January 11, 2010, represents a major effort by the Indian government to advance the country's development, manufacturing, and production of solar power (MNRE, 2017). This mission aimed to strengthen the domestic solar industry by enforcing local content requirements for solar plant manufacturing in India. The NSM was rolled out in multiple phases and batches, with certain batches mandating that solar power developers include a specific amount of domestic content. Each batch had varying conditions, allowing developers to use foreign cells and modules if they met domestic content criteria (ICTSD, 2016). According to the NSM guidelines, 10% of the modules in Indian solar plants must be locally produced. Local content requirements (LCRs) were employed to promote the domestic manufacturing of solar photovoltaic (PV) systems and concentrated solar power (CSP). For solar thermal plants, the NSM stipulated that 30% of the content must be locally sourced (GDI, 2013).

1. Adopted: Deringer, H. et al (2018), The Economic Impact of Local Content Requirements: A Case Study of Heavy Vehicles, ECIPE Occasional Paper 1/2018, //efaidnbmnnnibpcajpcglclefindmkaj/ https://ecipe.org/wp-content/uploads/2018/01/LCR-Paper-final-2-KL.pdf

Despite the intent to bolster the local solar industry, LCRs were perceived as significant barriers by stakeholders in the Indian solar market. A World Bank study in 2010 revealed that 75% of industry stakeholders, particularly in the solar PV sector, viewed LCRs as obstacles to solar plant development in India (GDI, 2013). In early 2013, the US challenged India's domestic content requirements for solar cells and modules under the NSM, leading to a dispute. The World Trade Organization's (WTO) Dispute Settlement Body (DSB) ruled in February 2016 that these requirements violated TRIMs and GATT Agreements. Although India initially appealed the DSB's decision, by late 2016, it agreed to comply with the recommendations and rulings, setting a deadline of December 14, 2017, to make the necessary adjustments (WTO, 2017c).

Questions:

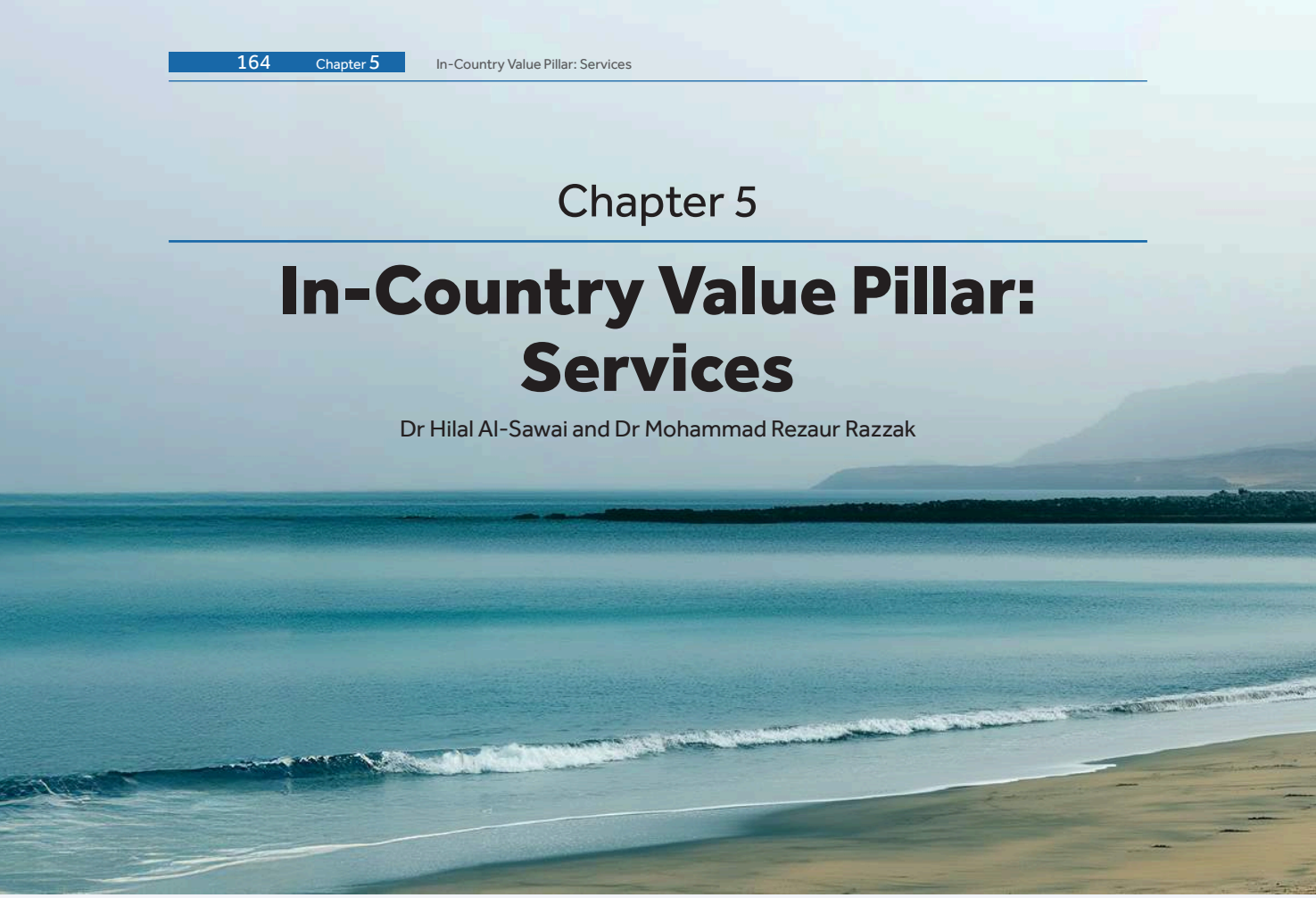
1. Discuss the impact of the National Solar Mission (NSM) on the development of the solar power industry in India. Analyze how the implementation of domestic content requirements influenced the growth of the domestic solar industry, and the challenges faced by solar power developers in complying with these requirements?

2. Evaluate the implications of the dispute between the US and India over the domestic content requirements set by the NSM for solar cells and modules. Explore the legal aspects of this dispute, including the ruling of the WTO's Dispute Settlement Body, and examine how this conflict influenced India's policies towards promoting its solar power sector on a global scale?

Chapter 5

In-Country Value Pillar: Services

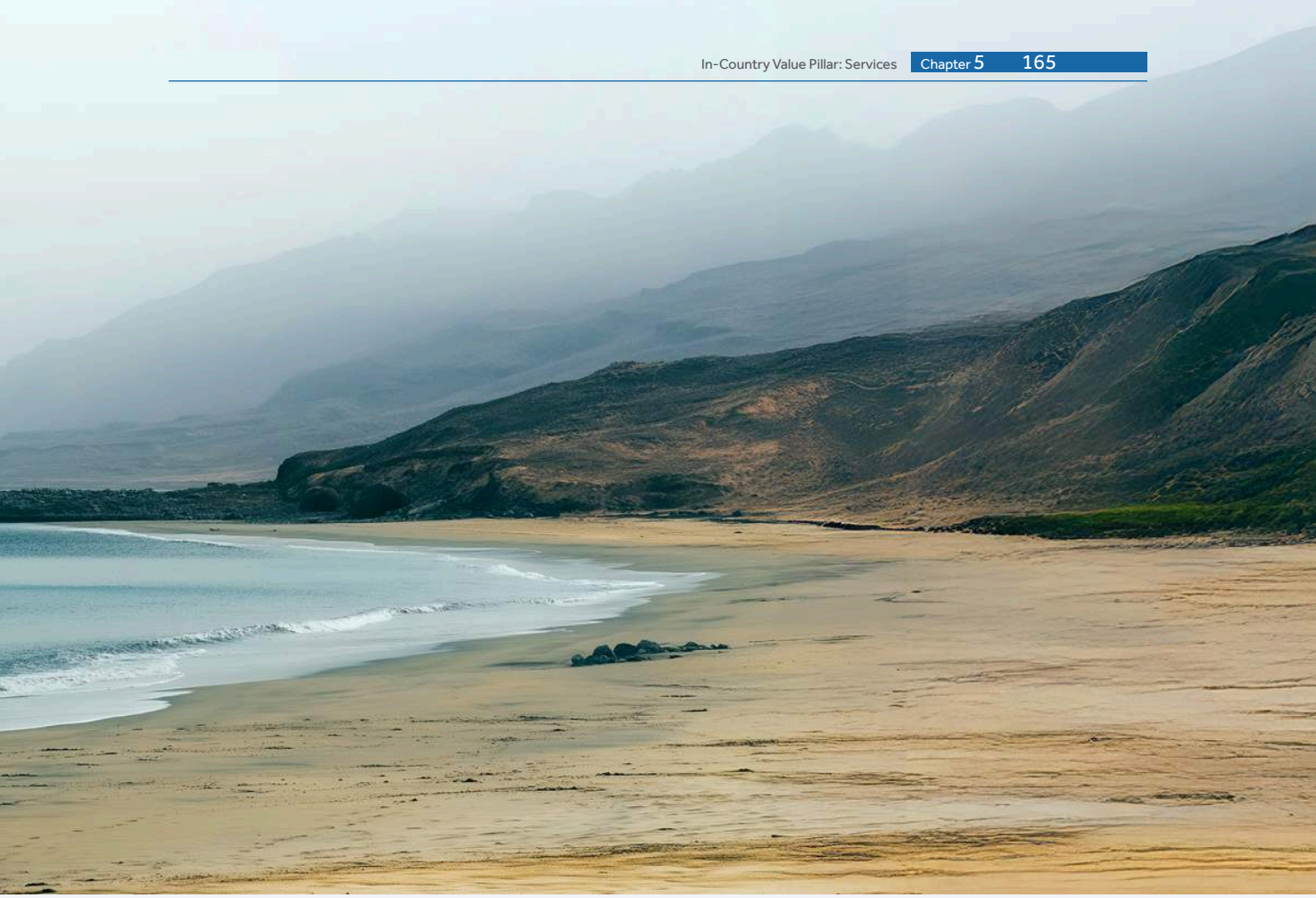
Dr Hilal Al-Sawai and Dr Mohammad Rezaur Razzak



Abstract

In-Country Value (ICV) has emerged as a crucial policy framework globally, aimed at fostering economic diversification, local job creation, and sustainable development. In Oman, a significant emphasis has been placed on ICV, particularly in the oil and gas sector, as the country seeks to reduce its dependency on hydrocarbon revenues. While the ICV initiatives have primarily focused on procurement, manufacturing, and human capital development, this chapter explores the role of the service element in enhancing ICV. Through a comprehensive analysis of policies, strategies, and case studies, this chapter aims to provide insights into how the service sector can contribute to maximizing ICV, thus promoting socio-economic growth and diversification in the Sultanate. The primary areas covered by this chapter are the role of service in ICV enhancement, the importance of services to the ICV goals, the alignment of services with vendor development programmes, and a comparison of local and international services, among other themes.

Keywords: *ICV, services, vendor development, local services, international services*



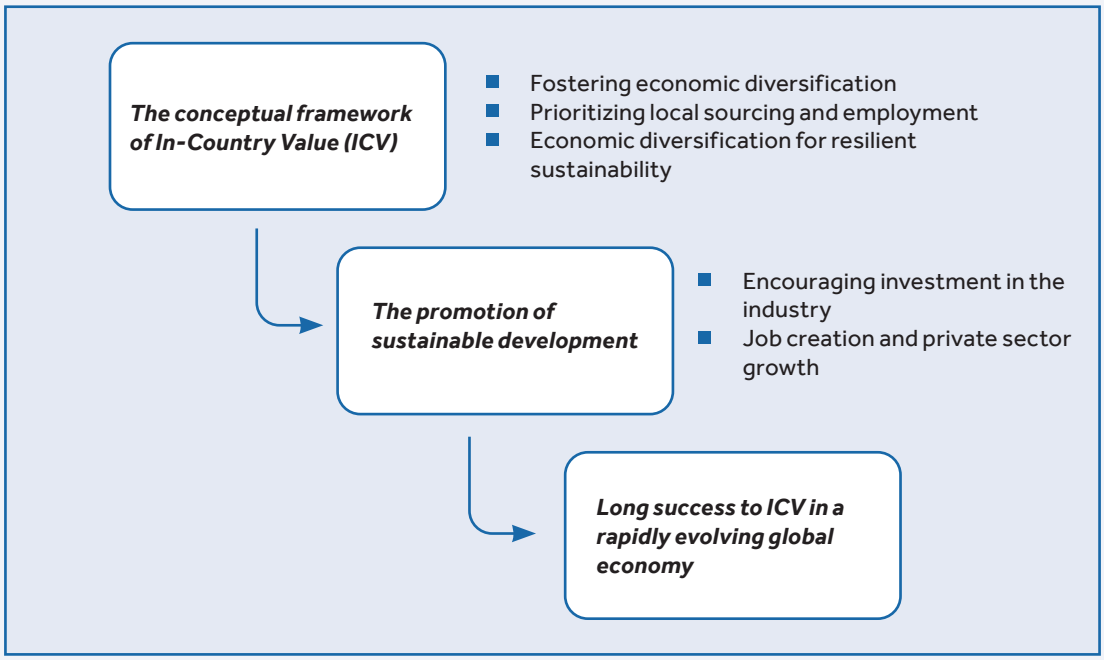
Learning Objectives:

- To understand the role of services in ICV and its significance.
- To analyse key service sectors with high ICV potential.
- To evaluate the advantages and disadvantages of utilizing ICV services.
- To analyse the challenges faced in the implementation of ICV programmes.
- To analyse recommendations and best practices for enhancing ICV services.

In-Country Value (ICV)

In-Country Value (ICV) encompasses a multifaceted approach aimed at maximizing the socio-economic benefits derived from investments within a country's borders. The conceptual framework of ICV revolves around enhancing local content, fostering economic diversification, and promoting sustainable development (MEM Oman, 2018). The conceptual framework of In-Country Value (ICV), as articulated by the Ministry of Energy and Minerals (MEM) in Oman in 2018, underscores the imperative of enhancing local content within the country's energy and minerals sectors. This involves not only maximizing the utilization of locally available resources but also promoting the participation of domestic businesses and the workforce in the supply chain. According to a report by the *Oman Observer*, the ICV framework includes specific metrics and criteria to assess the level of local content in projects and operations, thereby incentivizing companies to prioritize local sourcing and employment (Oman Observer, 2018). Furthermore, fostering economic diversification is a central tenet of the ICV framework, reflecting Oman's strategic vision to reduce dependency on oil and gas revenues and broaden the economic base. As noted by Al-Busaidi *et al*. (2019), Oman's Vision 2040 emphasizes the need for economic diversification to create a sustainable and resilient economy capable of withstanding external shocks. The ICV framework aligns with this vision by encouraging investment in non-oil sectors such as tourism, manufacturing, and logistics, thereby stimulating job creation and private sector growth. Moreover, the promotion of sustainable development is a fundamental principle embedded within the ICV framework. This entails integrating environmental, social, and economic considerations into decision-making processes to ensure that development is both environmentally sound and socially inclusive. According to the Oman Sustainable Development Goals (SDGs) Voluntary National Review, the ICV framework aligns with Oman's commitment to achieving the SDGs by 2030, particularly Goal 8 (Decent Work and Economic Growth) and Goal 9 (Industry, Innovation, and Infrastructure) (Oman Sustainable Development Goals Voluntary National Review, 2019). By incorporating sustainability criteria into project evaluations and procurement practices, the ICV framework seeks to promote resource efficiency, social inclusion, and long-term prosperity. Figure 5.1 presents a framework on successful ICV global economy developed by Al-Busaidi *et al.* (2019).

Figure 5.1: Framework of successful ICV global economy



Source: Al-Busaidi et al. (2019)

The ICV framework in Oman adopts a multifaceted approach to economic development, encompassing the enhancement of local content, the promotion of economic diversification, and the advancement of sustainable development goals. Through targeted policies, incentives, and partnerships, the ICV framework aims to create a conducive environment for inclusive and sustainable growth, positioning Oman for long-term success in a rapidly evolving global economy.

At its core, ICV seeks to create value by maximizing the participation of local businesses, labour, and resources in various industries, including oil and gas, construction, and manufacturing (Al Balushi & Al Jabri, 2020). By prioritizing the development of indigenous capabilities and fostering partnerships between local and international firms, ICV initiatives contribute to building a more resilient and competitive economy (OCCI, 2019). Moreover, ICV plays a crucial role in promoting sustainable development by creating employment opportunities, transferring technology and knowledge, and reducing the carbon footprint associated with imports and outsourcing (Al Maqbali & Al Balushi, 2022).

The Role of Service Element in ICV Enhancement

The services pillar in the ICV framework is defined differently based on the context of each country. This variation is influenced by the specific economic conditions,

industrial capabilities, regulatory environments, and strategic priorities of each nation. The ICV aims to maximize the use of local services to enhance the economic benefits and minimize the economic leakage within a country (Al-Sawai, 2023).

The service sector plays a pivotal role in enhancing ICV in Oman, contributing significantly to economic diversification and local content development (Al Balushi &Al Jabri, 2020). Analysis reveals that services such as consulting, engineering, IT, training, and logistics have considerable ICV potential due to their ability to leverage local expertise and resources (Al Maqbali & Al Balushi, 2022). These services not only create employment opportunities but also facilitate knowledge transfer and skill development among the local workforce, thereby fostering sustainable development (MEM, Oman, 2018).

Key Services with High ICV Potential

Case studies provide anecdotal evidence of successful ICV integration in service contracts and projects in Oman. For instance, collaborations between international consulting firms and local partners have resulted in the transfer of advanced technologies and methodologies, leading to the development of indigenous capabilities in areas such as project management and strategic planning (OCCI, 2019). Similarly, partnerships between Omani engineering companies and multinational corporations have facilitated the localization of engineering expertise, enabling Oman to undertake complex projects independently (Al Balushi & Al Jabri, 2020).

In Oman, several key services demonstrate high ICV potential due to their ability to leverage local expertise and resources while contributing significantly to economic diversification. These key services include consulting services, encompassing a wide range of activities, including management consulting, financial advice, and market research. Local consulting firms in Oman have the capability to provide valuable insights and advice to businesses and government entities, thereby promoting local decision-making and strategic planning (Al Balushi & Al Jabri, 2020). Engineering services play a crucial role in infrastructure development, construction projects, and industrial operations. Omani engineering firms possess the technical expertise to undertake a variety of projects, ranging from civil engineering and architectural design to mechanical and electrical engineering (MEM Oman, 2018).

Information Technology (IT) Services: The IT sector in Oman is rapidly expanding, driven by government initiatives to promote digital transformation and innovation. Local IT companies offer several types of services, including software development, cybersecurity, cloud computing, and IT consulting, thereby contributing to the development of a knowledge-based economy (OCCI, 2019).

Training and Education Services: Training and education services are essential for developing human capital and building a skilled workforce. Omani training institutes and educational institutions offer programmes and courses tailored to the needs of various industries, including vocational training, professional development, and technical skills enhancement (Al Maqbali & Al Balushi, 2022).

Logistics Services: With its strategic location and well-developed infrastructure, Oman has emerged as a key logistics hub in the region. Local logistics companies provide a range of services, including transportation, warehousing, freight forwarding, and supply chain management, facilitating trade and commerce both domestically and internationally (MEM Oman, 2018).

These key services not only contribute to economic growth and diversification but also have the potential to create employment opportunities, foster innovation, and promote sustainable development in Oman.

CASE STUDY 1: Promoting Local Content Development – A Case Study of ICV Services in Saudi Arabia's Renewable Energy Sector

Background:

Saudi Arabia has set ambitious goals to diversify its economy and reduce its dependency on oil revenues. As part of this broader strategy, the Kingdom has been actively stimulating the development of renewable energy sources (e.g. solar and wind power). In line with its vision for economic transformation, Saudi Arabia has implemented ICV policies to maximize local content and participation in the renewable energy sector.

A leading renewable energy company, SolarTech Saudi, was awarded a major contract to develop a large-scale solar power plant in the Kingdom. Recognizing the importance of ICV compliance, SolarTech Saudi embarked on a comprehensive strategy to integrate local content and services into its project execution.

1. **Partnering with Local Engineering Firms:**

   SolarTech Saudi collaborated with several local engineering firms to design and engineer key components of the solar power plant. By leveraging the technical expertise and capabilities of these local partners, SolarTech Saudi not only met ICV requirements but also contributed to the development of the local engineering sector.

2. **Investing in Local Training and Skill Development:**

   To address skill shortages and build a skilled workforce, SolarTech Saudi established training programmes in collaboration with local vocational institutes and universities. These programmesfocused on providing specialized training in solar energy technology, project management, and safety standards, equipping Saudi nationals with the necessary skills to participate in the renewable energy industry.

3. **Procuring Local Materials and Equipment:**

   SolarTech Saudi prioritized the procurement of materials and equipment from local suppliers wherever feasible. By sourcing locally produced components, such as solar panels, inverters, and mounting structures, SolarTech Saudi not only supported local businesses but also reduced reliance on imports, contributing to the Kingdom's economic diversification goals.

4. **Engaging with Local Communities:**

   In addition to meeting ICV requirements, SolarTech Saudi actively engaged with local communities to ensure their participation and support for the project. The company implemented community outreach programmes, provided job opportunities for local residents, and supported local initiatives to enhance social and economic development in the project area.

Results and Impact:

Through its ICV-focused approach, SolarTech Saudi successfully developed and commissioned the solar power plant on schedule and within budget. The project not only contributed to Saudi Arabia's renewable energy capacity but also generated significant socio-economic benefits for local communities. Key outcomes included:

- Creation of job opportunities for Saudi nationals in the renewable energy sector, including engineering, construction, and operations.
- Transfer of knowledge and technology to local partners, enhancing their capabilities and competitiveness.
- Stimulus to the growth of local industries, such as engineering, manufacturing, and construction, through increased demand for goods and services.

- Strengthening of partnerships between the private sector, government entities, and local communities, fostering collaboration and alignment towards common development goals.

Conclusion:

The case study of SolarTech Saudi demonstrates the potential of ICV initiatives to drive local content development, promote economic diversification, and create sustainable growth opportunities in Saudi Arabia's renewable energy sector. By adopting a holistic approach that integrates local expertise, resources, and partnerships, companies like SolarTech Saudi can not only meet ICV requirements but also contribute to the Kingdom's broader vision for a diversified and resilient economy.

Source:https://www.solartech.cn/cases/Solar-Irrigation-System-Project-in-Saudi-Arabia_73.html

The Importance of ICV Services

ICV services play a crucial role in diversifying Oman's economy away from its traditional reliance on oil and gas revenues. By promoting local content and fostering the growth of service industries such as consulting, engineering, IT, training, and logistics, Oman reduces its dependence on hydrocarbon exports and creates new avenues for economic growth (Al Balushi & Al Jabri, 2020). The development of ICV services generates employment opportunities for Omani citizens, contributing to the country's goal of reducing unemployment rates and enhancing workforce participation. Localizing services such as consulting, IT, and training ensures that skilled Omanis are employed in high-value sectors, thereby boosting income levels and improving living standards (MEM, Oman, 2018). ICV services facilitate the transfer of knowledge, technology, and expertise to Oman's workforce, thereby enhancing human capital development. Through partnerships with international firms and investments in education and training programmes, Omanis gain access to cutting-edge skills and capabilities, making them more competitive in the global marketplace (OCCI, 2019).

The development of ICV services encourages local entrepreneurship and innovation, as Omani businesses seize opportunities to provide specialized services to domestic and international markets. By nurturing a vibrant ecosystem of service providers, Oman fosters a culture of entrepreneurship and creativity, driving long-term economic

growth and prosperity (Al Maqbali & Al Balushi, 2022). ICV services contribute to Oman's sustainable development agenda by promoting environmentally friendly practices, reducing carbon emissions, and minimizing the environmental footprint associated with imports and outsourcing. Through investments in green technologies, renewable energy, and sustainable logistics solutions, Oman advances its commitment to environmental stewardship and resource conservation (MEM, Oman, 2018).

In summary, the importance of ICV services extends beyond economic benefits to encompass social, environmental, and developmental impacts, positioning Oman for sustainable growth and prosperity in the years to come.

The Advantages and Disadvantages of Using ICV Services

In the pursuit of sustainable economic development, the utilization of local In-Country Value (ICV) services emerges as a crucial strategy, both within Oman and on a global scale. Embracing local ICV services offers a multitude of advantages. Firstly, it serves as a catalyst for stimulating the local economy by generating employment opportunities and nurturing the growth of indigenous businesses (Oman Observer, 2022). As reported by the *Oman Observer*, initiatives promoting ICV in Oman have been instrumental in bolstering the economic contributions of small and medium enterprises (SMEs), thereby fostering a more inclusive economic landscape. Additionally, leveraging local ICV services encourages collaboration between international entities and local businesses, facilitating knowledge exchange and skill development. Such collaborations not only foster innovation but also enable the tailoring of solutions to address specific local needs and conditions, ultimately enhancing project outcomes.

However, alongside these benefits, the utilization of local ICV services also presents certain challenges. One notable disadvantage is the potential lack of specialization among local service providers compared to their international counterparts. This limitation could impede the delivery of certain projects or services, impacting quality and efficiency (Gulf News, 2022). Moreover, relying solely on local ICV services may entail increased costs, particularly if local providers face limited competition or if additional expenses are incurred for capacity building or technology transfer. Oxford Business Group underscores the importance of carefully assessing these cost implications, as they could affect the competitiveness of projects on a global scale (Oxford Business Group, 2022).

The aim of implementing ICV services within industries is to bolster local economies by incentivizing the use of domestic goods and services. However, this approach is not without its drawbacks. As highlighted by economic analyses, including those found in academic literature such as *The Quarterly Journal of Economics*, ICV mandates may

inadvertently lead to increased costs for businesses. This is due to the requirement to procure goods and services locally, potentially disregarding more cost-effective or higher-quality options available from international suppliers. Moreover, such directives could hinder businesses' access to cutting-edge technology and expertise, particularly in sectors where local capacity may be limited. The compliance burden of adhering to ICV regulations may further strain businesses, necessitating additional administrative efforts for documentation, reporting, and monitoring, thus diverting resources from core operations. Additionally, ICV requirements may distort market dynamics by favouring local suppliers over international competitors, possibly fostering monopolistic practices and stifling innovation. As a result, policymakers and industry stakeholders must carefully consider the trade-offs and potential pitfalls associated with ICV initiatives to strike a balance between fostering local economic development and maintaining business competitiveness on a global scale.

Therefore, it may be asserted that while the adoption of local ICV services holds significant promise for driving sustainable economic growth, it is imperative to navigate the associated advantages and disadvantages judiciously. By striking a balance between leveraging local expertise and addressing potential limitations, policymakers and industry stakeholders can maximize the positive impact of ICV initiatives, both within Oman and across the globe. Table 5.1 illustrates some advantages and disadvantages of prioritizing local services.

Table 5.1: Advantages and disadvantages of using local ICV services

Advantages	Disadvantages
Generating employment opportunities and nurturing the growth of indigenous businesses	Higher cost of procuring from local service providers. This may happen because often non-local service providers have lower costs than local ones due to economies of scale.
Bolstering the economic contributions of small and medium enterprises (SMEs)	ICV requirements may distort market dynamics by favouring local suppliers over international competitors.
Encouraging collaboration between international entities and local businesses	Mismatched priorities ICV requirements may not align with businesses' priorities or strategic objectives, leading to tensions between regulatory compliance and business goals.
Facilitating knowledge exchange and skill development	Exposure to possible corruption. The implementation of ICV programmes may increase the risk of corruption, as local businesses may seek to influence procurement decisions or misrepresent the origin of goods and services to meet ICV requirements.

Source: (Oxford Business Group, 2022)

CASE STUDY 2: ICV Services Implementation in Bahrain's Financial Sector

Background:

Bahrain, known as the financial hub of the Middle East, has been actively promoting economic diversification and local content development. The government has initiated various ICV policies to encourage the growth of local businesses and enhance the contribution of the financial sector to the economy.

Case Study:

A leading international bank, Gulf Finance Bank (GFB), expanded its operations in Bahrain, aiming to leverage the Kingdom's strategic position and robust financial infrastructure. To comply with Bahrain's ICV regulations and contribute to the local economy, GFB implemented several initiatives:

1. **Local Hiring and Capacity Building:**

   GFB prioritized the recruitment of Bahraini nationals for key positions within the bank, including management, finance, and customer service roles. Additionally, the bank established training programmes and partnerships with local educational institutions to develop specialized skills in areas such as banking, finance, and risk management.

2. **Support for SMEs and Entrepreneurship:**

   Recognizing the importance of supporting local SMEs and fostering entrepreneurship, GFB launched initiatives to provide financial services, mentorship, and networking opportunities to Bahraini entrepreneurs. The bank offered preferential lending terms, business advisory services, and access to its extensive network of corporate clients to help SMEs grow and thrive in the competitive market.

3. **Investment in Technology and Innovation:**

   GFB invested in local technology startups and innovation hubs to promote the development of fintech solutions and digital banking services in Bahrain. By partnering with local innovators and entrepreneurs, the bank aimed to enhance its digital capabilities, improve customer experience, and drive innovation in the financial sector.

Results and Impact:

Through its ICV-focused initiatives, Gulf Finance Bank made significant contributions to Bahrain's economy and financial ecosystem:

- Increased employment opportunities for Bahraini nationals, particularly in the financial services sector.
- Empowerment of local SMEs and entrepreneurs, leading to the growth of Bahrain's entrepreneurial ecosystem and the creation of new businesses and jobs.
- Promotion of technology and innovation, positioning Bahrain as a regional leader in fintech and digital banking solutions.
- Strengthening of partnerships between the banking sector, government agencies, and local communities, fostering collaboration and alignment towards common economic development goals.

Conclusion:

The case study of Gulf Finance Bank highlights the importance of ICV initiatives in promoting economic diversification, local content development, and sustainable growth in Bahrain's financial sector. By adopting a strategic approach that integrates local hiring, support for SMEs, and investment in technology and innovation, companies like GFB can contribute to Bahrain's vision of becoming a dynamic and competitive financial hub in the region.

Benefits of Vendor Development Programme to ICV

The ICV Vendor Development Programme can help the services' vendors to gain several benefits, including:

1. Capacity-Building Workshops: The ICV programme organizes workshops and training sessions on topics such as production optimization, quality management, marketing strategies, and financial management. These workshops are conducted by industry experts and aim to enhance the skills of local vendors.
2. Access to Finance: The programme partners with financial institutions to provide SMEs with access to affordable loans and financing options. It also assists vendors in preparing business plans and loan applications to secure funding for business expansion and investment in technology and equipment.

3. Market Linkage Support: The ICV programme facilitates partnerships between local vendors and larger corporations or multinational companies operating in Valueland.

4. Quality Improvement Initiatives: The programme offers assistance to vendors in implementing quality management systems, obtaining relevant certifications (such as ISO standards), and improving product quality and consistency. This helps vendors meet the requirements of international markets and compete effectively with imported goods.

5. Technology Adoption: The ICV programme promotes the adoption of modern technologies and production techniques among local vendors. It provides technical assistance, training, and access to technology providers to help vendors upgrade their processes and improve productivity and efficiency.

6. Mentorship and Advisory Services: The ICV programme assigns mentors or business advisors to work closely with individual vendors, providing guidance, support, and personalized advice on business development, problem solving, and decision-making. By offering these comprehensive support services, the Vendor Development Programme In-Country Value (ICV) aims to empower local vendors, stimulate economic growth, create jobs, and contribute to the overall development of Valueland's economy.

Importance of the Service Pillar in ICV Initiatives

1. Job Creation: The services sector is often a significant source of employment within a country. By emphasizing local services in ICV policies, governments can create job opportunities for their citizens, reducing unemployment rates and boosting economic growth.

2. Economic Diversification: Developing a robust services sector can contribute to economic diversification, reducing dependence on a single industry or commodity. This diversification strengthens the resilience of the economy to external shocks and fosters long-term stability.

3. Value Addition: Services add value to other sectors of the economy. For example, transportation and logistics services enhance the efficiency of supply chains, while financial services facilitate investment and trade. By prioritizing the development of local services, countries can maximize the value generated from their natural resources or manufacturing activities.

4. Technology Transfer and Innovation: Many services, such as information technology, consulting, and research and development, drive innovation and

technology adoption. Encouraging the growth of these sectors through ICV initiatives can facilitate knowledge transfer, improve productivity, and enhance competitiveness on a global scale.

5. Quality of Life: Services such as healthcare, education, and public utilities contribute directly to improving the quality of life for citizens. Investing in these areas through ICV programmes can enhance social development, promote equality, and foster a more inclusive society (Rentizelas, 2020).

Comparison Between Local and International Services in Terms of In-Country Value (ICV):

1. Local Services: Local services directly contribute to job creation within the country, employing local talent and boosting employment rates (Al Ruqaishi, 2016).
    - *Economic Impact:* Revenues generated from local services circulate within the country, contributing to the growth of the domestic economy through increased consumption and investment.
    - *ICV Contribution:* Using local services promotes the development of domestic industries, enhances local capabilities, and fosters economic self-reliance (Rachel, Yusra Ribhi, Michael, and Malvikha, 2022).

2. International Services and Access to Expertise: International services often bring specialized expertise, technologies, and best practices that may not be readily available locally, contributing to skill development and knowledge transfer.
    - Market Access: Engaging international services can provide access to global markets, expanding opportunities for trade and investment.
    - Cost Consideration: While international services may offer advantages in terms of expertise or technology, they may also come with higher costs, which could impact the overall value proposition for ICV initiatives.

International services may offer access to expertise and markets, but local services are essential for job creation, economic development, and fostering self-sufficiency. Balancing the use of local and international services is crucial for maximizing ICV while leveraging global opportunities. Table 5.2 highlights some contrasts between local and international services.

Table 5.2: A comparison between local and international services

	Local Services	International Services
Job Creation	Increasing employment rates within the country	Reliance on expatriate workers
Economic Impact	Contributing to the growth of economy through increased consumption and investment	Reduces the contribution to the growth of the country's economy
ICV Contribution	Promotes the development of domestic industries	Enhances international industries and capabilities
Cost Consideration	Lower costs for ICV initiatives	Higher costs
Market Access	Difficulty accessing markets	Expanding opportunities for trade and investment
Access to Expertise	Lack of experience	Experience and the best technologies

Source: Al Ruqaishi (2016)

Challenges of ICV Services

In the context of Oman, the implementation of In-Country Value (ICV) initiatives encounters several challenges that hinder their effectiveness and impact on economic development. One significant challenge is the limited local capacity within certain industries, which restricts the availability of skilled labour and specialized expertise (Oman Observer, 2022). This constraint often leads to a reliance on international companies for project execution and technology transfer, undermining the objective of enhancing local content and participation. Additionally, the regulatory framework governing ICV programmes in Oman can pose challenges in terms of clarity, consistency, and enforcement (The National, 2022). Ambiguities or inconsistencies in regulations may create uncertainties for stakeholders, affecting their ability to plan and implement ICV strategies effectively. Moreover, Oman's investment climate and business environment present obstacles to the successful execution of ICV initiatives (Gulf News, 2022). Factors such as bureaucratic procedures, legal constraints, and market volatility can deter local and foreign investors, impacting the sustainability of ICV projects. Furthermore, while efforts are being made to develop local skills and capabilities, skill shortages persist in critical sectors, necessitating greater investments

in education, training, and workforce development (Oxford Business Group, 2022). Addressing these challenges requires a coordinated approach involving government interventions, private sector engagement, and strategic partnerships to enhance the resilience and effectiveness of ICV services in Oman's economic landscape. Table 5.3 presents some of the challenges of ICV services.

In addressing the challenges of ICV services in Oman, a multifaceted approach is essential, encompassing capacity building, regulatory enhancement, investment promotion, and skill development (Oman Observer, 2022). Firstly, investing in local capabilities and expertise through targeted training programmes and technology-sharing partnerships is imperative (The National, 2022). Collaborative efforts between government entities, educational institutions, and private sector organizations can ensure a sustainable pipeline of skilled labour and specialized talent (Gulf News, 2022). For example, Vendor Development Programmes (VDPs) stand as pivotal mechanisms in fortifying supply chain resilience within modern business landscapes. These programmes, aimed at nurturing supplier relationships and enhancing their capabilities, have garnered significant attention owing to their potential to mitigate risks and ensure operational continuity amidst uncertainties (Gulf News, 2022). Through a synthesis of literature and empirical insights, the article explores the efficacy of VDPs across diverse industries and organizational settings. Central to this inquiry is an exploration of the multifaceted components, effectiveness, and outcomes associated with VDP implementation. Leveraging both qualitative and quantitative methodologies, the study scrutinizes factors underpinning the success of VDPs and their consequential impact on supply chain performance, risk management, and innovation. By delving into supplier selection criteria, capacity-building initiatives, relationship management practices, and incentive mechanisms, this research seeks to unveil best practices and strategies conducive to bolstering supply chain resilience (Gulf News, 2022). Ultimately, insights gleaned from this research endeavour aspire to furnish organizations with actionable strategies for orchestrating effective VDPs, thereby fortifying their supply chain resilience and competitive edge in dynamic business environments.

Secondly, regulatory frameworks governing ICV programmes need enhancement to provide a conducive environment for investment and business operations (Oxford Business Group, 2022). Streamlining bureaucratic procedures, reducing administrative barriers, and ensuring transparent governance mechanisms are crucial steps toward facilitating smoother implementation of ICV initiatives. Thirdly, measures to improve Oman's investment climate and business environment are necessary (Oman Observer, 2022). Reforms aimed at encouraging foreign direct investment (FDI), simplifying regulatory processes, and enhancing legal frameworks can attract greater investment and stimulate economic growth (The National, 2022). Fourthly, prioritizing investments in education, vocational training, and workforce development programmes is essential to address skill shortages (Gulf News, 2022). Tailored training programmes aligned

with the needs of specific sectors and industries can enhance the employability of the local workforce (Oxford Business Group, 2022). Lastly, fostering collaboration among stakeholders, including government agencies, private sector entities, academia, and civil society organizations, is crucial (The National, 2022). Platforms for dialogue, knowledge sharing, and collaboration can facilitate collective action and drive sustainable development outcomes (Oman Observer, 2022). By implementing these solutions in a coordinated manner, Oman can overcome the challenges associated with ICV services and unlock the full potential of its local economy, promoting inclusive growth, job creation, and economic diversification. Figure 5.2 presents a supplier development matrix adopted from Han (2009).

Figure 5.2: Supplier development activities matrix

Related Areas / Capabilities	Product Related	ProcessRelated	Operating Systems Related
Technical Capability	Capabilities in: ■ Design ■ New Product Introduction ■ Feasibility Testing ■ Product Improvement	■ Process Capability ■ Process Design ■ Automation ■ Reconfiguration	■ CAD/CAM ■ CIM/FMS ■ JIT/MRP
Quality Capability	■ Specification Limits ■ Incoming Materials Control	■ Process Capability ■ Testing Equipment ■ Workmanship (skills)	■ Quality Assurance Program ■ Quality Circles ■ S.P.C. Program ■ Worker Training
Delivery Capability	■ Product Mix ■ Materials Lead Time	■ Capacity Level ■ Process Flexibility ■ Setup Times	■ Order Entry System ■ Scheduling Flexibility ■ Transportation/ Inventory System
Cost Capability	■ Value Analysis ■ R & D Expenditure ■ Cost Reduction Programs	■ Process Efficiency ■ Capital Investment ■ Rationalization of Work Place	■ Work Productivity ■ Indirect Costs ■ Contro

Source: (Han, 2009)

In this stage of the programme, the development team must prioritize the focus areas and establish the sequence of activities. The emphasis varies based on the programme's maturity and the supplier's status. Initially, the focus is usually on meeting technical specifications, thus prioritizing the supplier's technical and quality capabilities. As the supplier progresses and demonstrates strong technical and quality competencies, the focus shifts more towards enhancing cost-efficiency and delivery capabilities (Han, 2009).

Chapter Summary

In conclusion, the services component of the In-Country Value (ICV) framework in Oman represents a critical strategy for driving economic diversification, fostering local content development, and promoting sustainable development. Through a focus on key services such as consulting, engineering, IT, training, and logistics, Oman has embarked on a journey towards reducing its dependency on hydrocarbon revenues and building a more resilient and competitive economy.

The significance of ICV services in Oman cannot be overstated. These services not only contribute to job creation, skills development, and local entrepreneurship but also play a pivotal role in enhancing Oman's global competitiveness and positioning it as a hub for innovation and knowledge-based industries. By leveraging local expertise and resources, Oman is able to maximize the socio-economic benefits derived from investments and create a more inclusive and prosperous society. Moving forward, it is imperative for Oman to continue its efforts in promoting ICV services and strengthening the ecosystem that supports their growth. This entails investing in education and training programmes, fostering partnerships between local and international firms, and creating an enabling regulatory environment that incentivizes local participation in key sectors of the economy.

In essence, ICV services represent a cornerstone of Oman's economic development strategy, providing a pathway towards sustainable growth, prosperity, and resilience in the face of global challenges. By harnessing the potential of ICV services, Oman is poised to realize its vision of becoming a diversified and knowledge-driven economy in the twenty-first century.

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Keywords Index:

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Business

C
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I
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IT

J
Job

K
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L
Local
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M
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N
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O
Objectives
Oman

P
Participation
Partnerships
Policies
Procurement
Projects
Prosperity

Q
Quality

R
Regulatory
Resilience
Resources
Revenue
Role

S
Sectors
Self-sufficiency
Services
Skill
SMEs
Socio-economic
Strategies
Sustainable

T
Technology
Training

U
Unemployment

V
Value
Vendor
Vision

W
Workforce
Workshops



Questions from Chapter 5:

In-Country Value Pillar : Services

A. Multiple Choice Questions:

1. What is a primary goal of the Services Pillar in the In-Country Value (ICV) framework of Oman?

A. To increase the import of specialized foreign services to enhance local industries.

B. To mandate that all services provided within the country must be performed by foreign experts.

C. To boost local service providers' capabilities and ensure a significant portion of services are delivered by Omani companies and workforce.

D. To prioritize only the financial services sector for development under the ICV framework.

2. Which sector is primarily emphasized in Oman's ICV initiatives?

A. Tourism

B. Oil and gas

C. Agriculture

D. Information technology

3. 3. What is the main goal of the ICV framework in Oman?

A. Maximizing profits for multinational corporations

B. Enhancing local content and participation

C. Minimizing employment opportunities for Omanis

D. Encouraging dependency on hydrocarbon exports

4. 4. Which of the following services is NOT mentioned as having high ICV potential in Oman?

A. Consulting

B. Engineering

C. Retail

D. Information Technology

5. 5. What is the significance of Vendor Development Programs (VDPs) in the context of ICV initiatives?

A. They hinder supply chain resilience.

B. They foster monopolistic practices.

C. They mitigate risks and ensure operational continuity.

D. They increase administrative barriers.

6. 6. What is one of the challenges mentioned in the implementation of ICV initiatives?

A. Limited local capacity within certain industries

B. Overabundance of skilled labour

C. Excessive regulatory flexibility

D. Lack of bureaucratic procedures

7. 7. How can the challenges of ICV services in Oman be addressed?

A. By reducing investments in education and training

B. By increasing bureaucratic procedures

C. By fostering collaboration among stakeholders

D. By implementing stricter regulations

8. 8. What does the utilization of local ICV services offer in terms of advantages?

A. It fosters monopolistic practices.

B. It reduces employment opportunities.

C. It stimulates the local economy.

D. It decreases administrative barriers.

9. 9. According to the provided content, what is the main drawback of relying solely on local ICV services?

A. Increased quality and efficiency

B. Decreased costs

C. Lack of specialization among local service providers

D. Enhanced access to cutting-edge technology

10. 10. Which of the following is NOT mentioned as a recommendation for overcoming the challenges of ICV services in Oman?

A. Investing in local capabilities and expertise

B. Streamlining bureaucratic procedures

C. Reducing investments in education and training

D. Fostering collaboration among stakeholders

B. Short questions

1. What is the primary objective of ICV initiatives in Oman?
2. Name one key service sector mentioned as having high ICV potential in Oman.
3. What are Vendor Development Programs (VDPs), and how do they contribute to ICV initiatives?
4. What are some challenges faced in the implementation of ICV programs in Oman?

5. What are two advantages of utilizing local ICV services, according to the provided content?

C. Long Questions

1. Discuss the role of the service sector in enhancing In-Country Value (ICV) in Oman, highlighting specific examples and their contributions to economic diversification and local content development.

2. Analyze the advantages and disadvantages of using ICV services, considering factors such as cost implications, market dynamics, and regulatory compliance. Provide examples and discuss potential strategies for mitigating the identified challenges.

3. Explore the recommendations provided for overcoming the challenges of ICV services in Oman, discussing the importance of capacity building, regulatory enhancement, investment promotion, and skill development. Evaluate the feasibility and potential impact of these recommendations on Oman's economic development goals.

D. Case Studies

Case study 1: Vendor Development Program for an ICV Service Provider

Background: XYZ ICV Services is a leading provider of integrated circuit verification solutions based in Europe. The company works with various vendors globally to source components and services essential for its operations. However, XYZ has identified the need to enhance its vendor relationships and improve the performance of its supply chain through a structured Vendor Development Program (VDP).

The objectives are to:

1. Improve the quality and reliability of sourced components and services.

2. Enhance collaboration and innovation with key vendors.

3. Reduce costs and lead times in the supply chain.

4. Mitigate risks associated with vendor dependencies.

5. What are the Steps to Implement the Vendor Development Program?

Case study 2: Vendor Development Program at Toyota

Background: Toyota Motor Corporation, one of the world's largest automotive manufacturers, has a well-established Vendor Development Program (VDP) aimed at enhancing the capabilities of its suppliers and improving the overall quality, efficiency, and innovation in its supply chain.

1. What are Steps to Implement the Vendor Development Program?

Chapter 6

Technical and Commercial Evaluation

Dr Ramo Palalic



Abstract

This chapter presents an in-depth exploration of the In-Country Value (ICV) project, focusing on its fundamental pillars and goals within the Omani context. The chapter explains the four main pillars of the ICV: investment, labour, products, and services. It then focuses on how the ICV project aims to boost Oman's socio-economic development by enhancing job creation and the production of goods and services. Further, it details the technical and commercial evaluation criteria essential for ICV project implementation, emphasizing the project's strategic significance in fostering local development. It also provides practical implications for understanding technical and commercial tender evaluations in Oman.

Keywords: *In-Country Value, ICV, PDO, tendering, procurement, Oman*



Learning Objectives:

- To analyse the ICV main pillars and goals
- To analyse the technical and commercial evaluation in ICV
- To evaluate the problem and the challenges of the technical and commercial success of ICV projects assessment
- To analyse the technological ICV evaluation
- To understand the ethics and sustainability principles in ICV projects.

Introduction

Government activities are crucial in enhancing the living standards of citizens, securing their well-being, and ensuring the availability of infrastructure that contributes to the country's socio-economic development. A critical aspect of government initiatives is public procurement (PP), also known as "tendering". Tendering is a process in which one entity (public or private) requests for a good or service.[1] Public procurement is a complex and highly structured process where governmental bodies purchase goods, products, or services from private companies (Dotoli *et al*., 2020; Etse *et al*., 2021).

This process significantly impacts national development, contributing approximately from 12% (Acikalin *et al*., 2023) to 13.3% (Hoekman & Taş, 2020) to 15% (Bergman & Lundberg, 2013) to global GDP, and accounting for more than 30% of government spending (Dotoli *et al*., 2020; Fazekas *et al*., 2024).

The main principle governing procurement procedures is to ensure fairness in the bidding process and the awarding of contracts. According to Goswami and Wettstein (2016) and Dotoli *et al.* (2020), these principles hinge on non-discrimination, the integrity of competition, and procedural transparency. In the European Union (EU), adherence to these principles is not merely recommended but mandated (Directive 2014/24/EU, EUR-Lex, 2024). In the EU context, alignment with these standards forms a compulsory aspect of the "newcomers" for aspiring EU member states, necessitating the enactment of relevant legislation.

The government's involvement in public procurement is not only foundational but transformative. For example, Oman has implemented an In-Country Value (ICV) initiative to revitalize local economic growth through procurement policies. This ICV strategic scheme is specifically designed to foster socio-economic advancement by prioritizing local development through procurement procedures. This approach is echoed by other Gulf Cooperation Council (GCC) nations, where ICV is considered a catalyst for national prosperity and development.

ICV serves as a strategic framework for augmenting the nation's economic output and securing long-term benefits for national development. It is generally employed across crucial sectors such as oil and gas, construction, and public infrastructure, particularly in regions seeking to boost local employment, enhance workforce competencies, advance technological capabilities, and preserve a greater share of the fiscal returns from large-scale, domestic projects in the private sector.

1. This is according to TenderBoard: available at https://www.tenderboard.biz/blog/what-is-the-tendering-process-and-is-it-difficult/ (accessed on 26 April, 2022).

CASE STUDY 1: Singapore's Sustainable Public Procurement (SPP)[2]

Singapore is relatively small country but recognized globally for its advanced infrastructure and a friendly entrepreneurial ecosystem, making it a magnet for technology[3] startups both regionally and internationally. This reputation has established Singapore as the main hub for entrepreneurship[4] in South-East Asia, largely due to its business-friendly environment.[5]

Understanding the critical role of socio-economic development, the Singaporean government has committed to enhancing the local commuting networks by sourcing goods and services from local providers. Potential bidders are invited to submit comprehensive proposals detailing their plans for upgrading the commuting infrastructure, including associated ancillary services.

To promote sustainable practices in public procurement, the government has laid out specific criteria for this initiative. The terms of the call emphasize sustainable public procurement (SPP), prioritizing private firms or consortia that demonstrate a commitment to community enhancement through engagement with local firms and service providers. International and regional companies are also encouraged to participate, highlighting the inclusive nature of this procurement.

The essence of this procurement strategy is not merely to secure the lowest price but to foster local economic growth by maximizing the involvement of local providers in the project. This approach to SPP not only supports the socio-economic advancement of local communities but also contributes to the broader development of Singapore.

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2. The case is a fictive one, designed by the author of the chapter for the purpose of learning and education (understanding the concept of the ICV project).
3. Harvard Business Review: available at: https://hbr.org/2015/02/how-singapore-became-an-entrepreneurial-hub (accessed on April 18, 2024).
4. Having a friendly entrepreneurial ecosystem gives outstanding results in the development of entrepreneurship, like the one provided here.
5. Development Asia: available at: https://development.asia/insight/why-singapores-ecosystem-technology-startups-among-best (accessed on April 18, 2024).

Rationale Behind the ICV Programme

The "In-Country Value" (ICV) programme aims to maximize the utilization of national assets and abilities to promote a diversified and self-sustaining economy. The objective of ICV is to reroute the advantages of economic and business spending into the nation's economy, by supporting local business sectors, generating employment opportunities, and enhancing the skills of the local or domestic labour force. However, other regional entities can be involved in ICV projects, but the focal point will be involving local subcontractors in the ICV projects to again have the local development and growth. Such a strategic move lowers dependency on imports, promotes the growth of domestic enterprises, and guarantees that the financial gains from major initiatives (projects) are returned to the local community. When necessary, ICV also encourages the use of regional products and services, which fosters creativity and competitive regional business. Through promoting technology transfer and knowledge exchange, ICV raises the nation's industrial capacity and international economic profile.

Taking all these things into consideration, it can be summed up that ICV is an instrument for nation building, intended to guarantee that the wealth created within a nation results in visible improvements to the country (increase in GDP) and for its citizens (increase in GDP per capita and standards of living) and builds a strong and resilient national economy.

ICV Goals

If several ICV projects are initiated in a country it can contribute a lot to economic diversification in which local industries can benefit and at the same time contribute to socio-economic development. Therefore, achieving set goals of ICV projects implies contribution to a healthier and self-sustainable economy. Additionally, it lessens reliance on imports and outside resources and establishes the national economy as a strong competitor in the global market. Investing in domestic labour, suppliers, and technology enables nations to create a sustainable economic framework that fosters strong growth and enduring prosperity.

The main goals set by ICV include, but are not limited to, the following:

- Development of local suppliers' networks
- Possibility of technology and knowledge transfer
- Increasing domestic and local employment rate
- Increasing the possibility of developing competencies and skills, know-how, and knowledge in local settings

- Increasing the possibility of professional development of groups and individuals in local settings

Development of Local Supplier Networks

Developing the capacity of local suppliers to satisfy the demands of bigger industries is the main goal of this ICV component. In doing this, the programme encourages business entities to maintain the economic benefits domestically by sourcing goods and services locally. In addition to supporting micro, small, and medium enterprises (SMEs), this ensures that big businesses support the local market through their supply networks. Similarly, along the same lines, such ICV projects will support the creation of a friendly entrepreneurial ecosystem that will create more jobs in the future (Palalić *et al.*, 2023; Stam, 2018; Stam & Spigel, 2016; Stam & van de Ven, 2019).

Possibility of Technology and Knowledge Transfer

As mentioned earlier, ICV projects aim to make it easier for foreign technology and knowledge to enter the nation through different international and local channels. Innovation and increasing local enterprises' competitiveness locally and globally depend on this transfer. It can involve partnerships with global companies, foreign direct investment (FDI) agreements with knowledge and technology sharing options, or pushing foreign-educated citizens to return home and employ their skills locally (different educational and professional development schemes).

Increasing Domestic and Local Employment Rate

The goal of ICV programmes is to generate employment possibilities that are connected to industry activity both directly and indirectly. While indirect employment might come from the additional services and supplier chains that support these businesses, direct employment may take place when local talent is hired for operational roles within industries. To lower unemployment and underemployment, the focus is on developing a wide range of employment possibilities that meet various levels of proficiency, from beginners to highly skilled technical professionals.

Developing Competencies, Skills, Know-How, Knowledge in Local Settings

ICV projects typically include training and development as an important enabler of local capacity building. This may include collaborating with academic institutions to match industry demands with curricula, delivering apprenticeships and internships, or provide job-specific education. By training local workforce with the industry-required skills and providing related certificates, they will increase employability and promote a culture of continuous improvement as well as lifelong learning.

Professional Development of Groups and Individuals in Local Settings

ICV programmes ensure that local or domestic employees are competitive, flexible, and prepared to meet the changing demands of the worldwide marketplace by emphasizing professional development. This in turn produces new human capital, promotes entrepreneurship, and helps to create a healthy and friendly economic climate. Therefore, they aim to increase the opportunities of professional development for both groups and individuals. Such professional development includes, but is not limited to, the following:

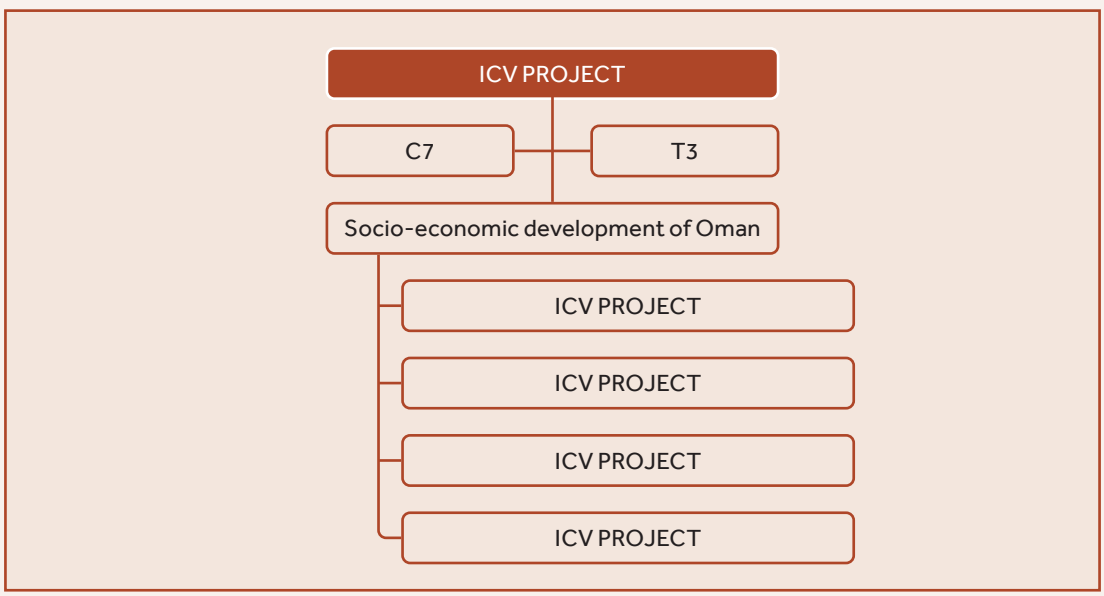
- *Enhanced education and training.* Improving educational institutions' ability to offer pertinent, sector-specific educational and training programmes. This covers both official education through higher institutions and professional training that gives people practical abilities that are in great demand.
- *Leadership and supervision (mentorship) development.* This strategy is twofold because it promotes different development at different levels. First, in ICV project programmes it is important to develop future business leaders, while generally preparing people for strategic and leadership positions in various industries. Second, ICV projects can establish mentorship programmes in such a way that skilled human capital (experienced experts or senior executives) can train, instruct, and advise the upcoming workforce.
- *Developing clear professional and career paths.* ICV projects ensure clearer promotion of career paths by establishing precise career pathways that enable people to fully understand and adhere to the procedures required to advance in their fields of expertise. This could involve succession planning in organizations to guarantee that people can envision their future career as professionals or experts in their fields.
- *Two-way street partnership.* This strategy aims for collaboration between public and private sectors. It implies promoting partnerships for training and development initiatives between the public and private sectors. As mentioned earlier, international organizations that contribute world-class standards and expertise may also be a part of these relationships.
- *Fostering a long-life learning culture.* This aspect implies fostering an environment that prioritizes long-life learning and career development. This can encompass rewards for lifetime learning, acknowledgement of non-traditional methods of learning, and encouragement of ongoing education.

The ICV Plan (Figure 6.1) consists of four pillars that are embedded in both T3 and C7, namely:

- Workforce
- Investment
- Goods
- Services

Let's delve into the specifics of C7 and T3, as the two paramount components of Oman's ICV plan. The following section will explore their key features to enhance our comprehension, and to introduce a brief case study that illustrates these concepts. Within the Omani context, the ICV plan consists of two integral parts (Figure 6.1), C7 and T3. C7 represents a firm's strategic blueprint plan while T3 means a technical report of the ICV plan.

Figure 6.1: ICV plan, pillars, and objective



Source: Author's compilation from PDO's documents (T3, C7)

CASE STUDY 2: PDO's Hotel Project in Al Seeb

PDO calls for a procurement in construction projects. It is about building a 5-star hotel in Al Seeb municipality worth 20 million O.R. In its call, it emphasizes the best chance to get this project lies in implementation of the ICV strategy to reflect the local socio-economic development of Al Seeb. In their documents provided to bidders, it seems that a bidder shall cover four ICV pillars. However, a bidder appears incapable of answering the call, though. If your company is the winning bidder, the primary concern on your mind is how to reply to this compelling request.

Students may vary with suggestions for how to respond to this call, and then be creative. However, as an instructor, you should guide them how to prepare a tender regarding this call using PDO's documents, T3 and C7. Final outcomes may differ; however, the main point is that they prepare a bid document which will add in country value, and the best one should be chosen.

Source: Hypothetical case created by the author

Technical Evaluation of ICV Projects (T3)[6]

To be part of an ICV project, all participants shall submit the T3[7] document that pertains to technical details of a project call. Overall, C7 and T3 in many ways overlap as they have the same aim in contributing to In-Country Value. Since T3 is the second main part of the ICV programme, it is crucial to develop insights into understanding what is required regarding the T3 submission.

The main body of the "technical" aspect of the tender (T3 document) can be summarized as in the following paragraphs below:

1. **Submission requirements:** For both technical and commercial tenders, tenderers must submit data in the proper format, making sure that every section is signed and stamped with the company's logo.
2. **Technical tender components:** These comprise a broad range of specifications, such as tender forms, performance guarantees or parent business information, financial standing, staffing, HSE capacity evaluation, and ICV information.
3. **Components of the commercial tender:** This component includes rates, ICV plans, and, if necessary, performance bond charges. It requires an electronically priced copy of the commercial tender via the RABiTAH SRM system.

6. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section T3 – In-Country Value (ICV).
7. For more details, please refer to the PDO document, Section T3.

4. **ICV focus:** The focus of the document is the ICV strategy, which should specify the contractor's *contribution to local value* and include employment and procurement tactics that support local suppliers and the Omani labour force.

5. **Operational guidance:** This covers practical details such as strategies for subcontractor management, executive and implementation plans, and how to meet tax needs.

6. **Appendices:**[8] A number of appendices include templates and other instructions for the necessary submissions, such as information about subcontracting agreements and forms of tender.

Through the ICV framework, the document supports local economic development by guaranteeing compliance with local legislation and acting as a standard procedural reference for contractors wishing to work with Oman's petroleum sector (PDO).

Comprehensive criteria for submitting technical and commercial tenders under specified revisions and updates are provided in the Petroleum Development Oman L.L.C. document "Section T3 – Data to be submitted for general services".[9]

Building on the previous section, the content ahead offers a more in-depth look at ICV, which is crucial for bidders to understand.

Commercial Evaluation of ICV Projects (C7)

According to the Partnering Group (2019),[10] the Omani government has defined ICV as "the total expenditures that are retained in-country that benefit business development, contribute to human capability development and stimulate productivity in the Omani economy". According to the same source, there are two key objectives of ICV in Oman:

i. Increasing Omanization and developing the skills of the national workforce.

ii. Increasing in-country spend on local goods and services.

8. For more information, please refer to "appendices" provided by PDO documents.
9. In May 2020, the most recent edition featured instructions for the In-Country Value (ICV) plan along with a commercial tender submission that was not priced. Additional changes included more requirements, such as risk assessments, participation of SMEs, and tax card information for Omani taxpayers.
10. Partnering Group: available at: https://www.propartnergroup.com/blog/2019/10/in-country-value-oman/

Additionally, the source spells out the following ICV elements (Partnering Group, 2019):

1. Investments in Fixed Assets
2. Omanization in the Workforce
3. Training of Omanis
4. Local Sourcing of Goods
5. Local Sourcing of Subcontracted Services
6. Development of National Suppliers
7. Development of National Training, Education, and R&D Institutions

The programme represents a key approach by policymakers to secure economic benefits beyond the simple sale of finite (scarce) resources such as oil and gas. The strategy aims to cultivate a globally competitive workforce and establish robust, resilient domestic supply chains in the country. Moreover, enterprises, private or public, involved in the ICV project are to have special credentials to benefit from the government like being "a responsive partner", as well as having a "special status" in the public (Partnering Group, 2019).

C7 – In-Country Value: Context of Oman Based on PDO Projects[11]

In their tender submission, bidders shall submit a comprehensive ICV plan that outlines how they will satisfy the ICV standards by utilizing certain tables in the C7 document.[12]

ICV Plan: The Main Framework[13]

While the ICV plan should include cost information in the commercial tender, there shall be a separate document within the technical tender that does not list costs. Bidders may be requested to submit additional information to amend or clarify their ICV plan prior to the contract award.

When choosing which project to award, the ICV plan's quality and thoroughness play a major role. The ICV plan commitments, including the tables, become enforceable in the event that the tender is accepted. For auditing purposes, bidders are required to maintain accurate records pertaining to the ICV plan. In accordance with the regular terms and conditions of the contract, the company retains the right to confirm and audit these records.

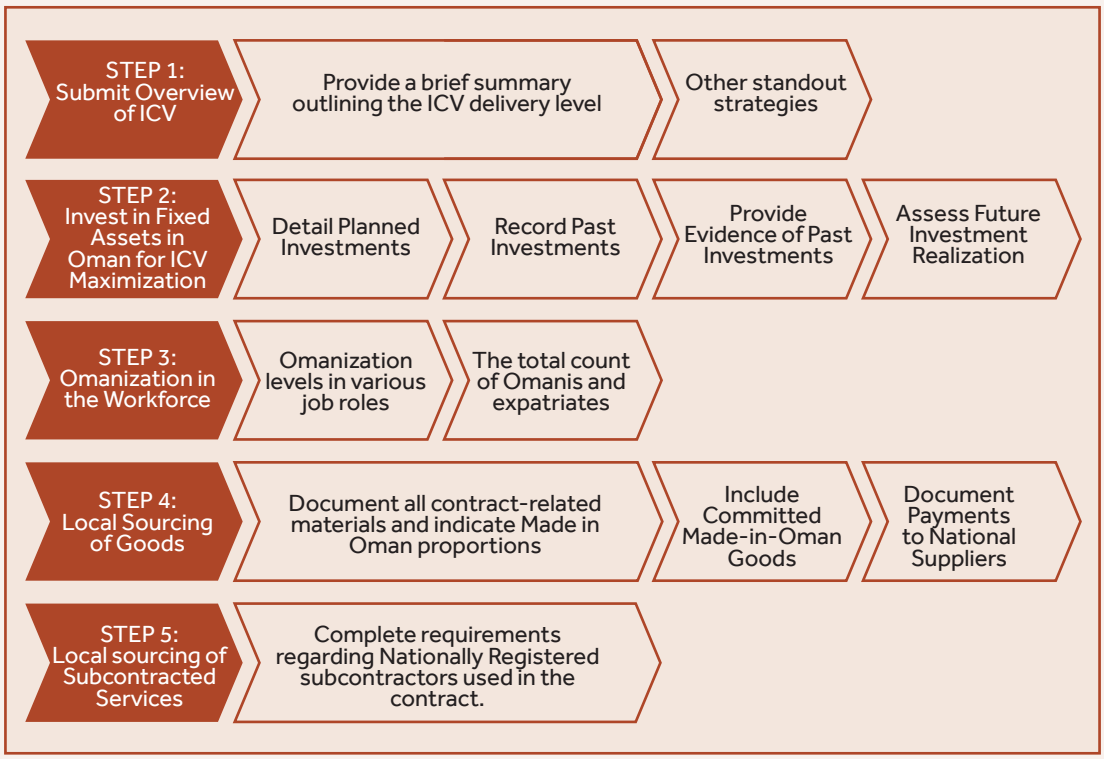
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11. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV).
12. Please refer to Tables A to D from Appendix 6A of the PDO document.
13. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 2.

Preparation of the ICV Plan

The following steps (Figure 6.2) can help in preparing the ICV plan based on C7-related details.

Figure 6.2: Suggested steps in ICV plan preparation



Source: Author's compilation based on PDO document (Section C7)

When preparing the ICV plan, the tenderer should begin with an overview that succinctly summarizes the proposed ICV level to be achieved through the contract's execution and draw attention to any particularly effective and planned strategies.

For investments in fixed assets within Oman, which are fundamental to maximizing ICV, the tenderer shall detail all planned capital investments.[14] These investments should be for the contract period and do not include those charged to the company. Additionally, past investments that have been made and are recorded on the balance sheet must be detailed too,[15] excluding CSR expenses unless they are capital investments meant to boost ICV. Evidence supporting past investments and a clarification on the likelihood of future investments must be provided.

14. Shall be provided in Table A1 of the PDO Document.
15. Shall be provided in Table A2 of the PDO Document.

Omanization targets should be specified,[16] including the levels of Omani nationals employed in various job categories, both in terms of headcount and man-hours. Additionally, the tenderer needs to provide the total number of Omani and expatriate employees[17] as registered with the Ministry of Manpower.

For local sourcing of goods, a document shall be provided and shall be filled in with materials and products to be used, indicating the expected spend on goods made in Oman.[18] Any Made in Oman goods that the company has committed to existing agreements should also be included.[19] The total amount to be paid to nationally registered suppliers for goods used in contract execution shall be listed, including those made by the tenderer if they are a nationally registered supplier.[20] Finally, for locally sourced subcontracted services, a different document shall be completed with amounts paid for services from nationally registered subcontractors, including those used in the execution of the contract.[21]

Small and Medium Enterprises (SMEs)[22]

According to Article 3 of PDO document C7, the following 13 steps are suggested to ensure that the field of SMEs is engaged in public procurement:

1. Assign minimum 10% of work to SMEs: (a) based on contract price for fixed contracts; (b) based on expenditure for call-off contracts.
2. Follow inter-bidding process for SME selection.[23]
3. Award scaffolding services to SMEs: must be 3% of the work, additional SME work to reach 10%.
4. If SME work identified does not reach 10%, identify additional SME work – in line with Article 3.1.5.
5. Encourage additional SME categories: beyond the 10% commitment.
6. Contractor's responsibility for SME management. This includes quality, schedule, and HSE.

16. Shall be specified in Tables B1 and B3. For more details, please refer to PDO document, C7, Paragraph 2.
17. Shall be provided in Table B2. For more details, please refer to PDO document, C7, Paragraph 2.
18. Shall be provided in Table C1. For more details, please refer to PDO document, C7, Paragraph 2.
19. Shall be provided in Table C1. For more details, please refer to PDO document, C7, Paragraph 2.
20. Shall be provided in Table C2. For more details, please refer to PDO document, C7, Paragraph 2.
21. Shall be provided in Table D. For more details, please refer to PDO document, C7, Paragraph 2.
22. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 3.
23. Refer to details of Paragraph 5, PDO document.

7. Provision of amenities for SMEs. A contractor is to arrange space and utilities.
8. Adjust SME work value for contract variations – proportional to the revised price or expenditure.
9. Select SME bidders from JSRS with transparent and fair process.
10. Consideration for SMEs with Entrepreneurs Card. Prioritize this in selection process.
11. Pre-qualification questionnaire (PQQ) is optional to screen potential SME bidders.[24]
12. Evaluation of SMEs with a valid Entrepreneurs Card; prioritize over those without. If fewer than 5 SMEs with a card are acceptable, include SMEs without a card (apply a 10% price benefit for those with the card).
13. Handling SME failure to deliver. With company approval, the contractor may suspend or terminate the subcontract and re-award to another SME.

The procedural steps mentioned above make sense because contractors are required to assign SMEs at least 10% of their work. For more flexible contracts, this percentage should represent the overall expenses or the fixed contract price. Additionally, they must follow a predetermined inter-bidding procedure to choose LCC and SME subcontractors (PDO document, Section C7).

Local Community Contractors (LCC)[25]

According to the PDO document (Section C7), contractors must assign at least 10% of their project work to local community contractors (LCCs), while this percentage is determined by comparing fixed contract pricing or variable expenditures. Moreover, when choosing LCCs, they will adhere to an equitable and open inter-bidding procedure, making sure that a certain amount of labour contributes to reaching the LCC involvement goal. Additionally, contractors should distribute additional work to LCCs proactively in case the initial allocations are not sufficient. In addition to meeting this quota, contractors are encouraged to find and oversee more LCC-suitable work areas while maintaining strict quality, timeliness, and safety standards. They should also give LCCs the facilities and workplace that they require. For any contract adjustment to

24. It means that bidders shall be registered via the Evaluation and Monitoring System to get this Entrepreneurs Card. Later on, through the same system, the performance of the bidder in the attained project is monitored and evaluated.
25. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 4.

remain intact, LCC work values must be adjusted accordingly.

Under this section, there is an article that treats Omanization of LCC bidders. Procedural steps suggest that to engage in inter-bidding procedures, contractors shall only extend invitations to LCCs who meet specific Omanization standards and are registered in the JSRS. This involves confirming, using the LCC's JSRS profile at the time of tender issuing, the number of Omani personnel and the percentage of Omanization. LCCs that meet the Omanization requirements shall receive an Expression of Interest (EOI) from contractors via the Business Gateway electronic Tendering System (BGeTS), providing them with enough time to show interest. Following that, all interested LCCs receive tenders.

LCCs with higher Omanization percentages than the lowest-priced technically acceptable bid receive a 10% price benefit when reviewing bids. With the company's consent, the contractor may suspend or discontinue the subcontract if an LCC fails to deliver as agreed upon and it's not their fault. Any work that is terminated must be completed by the contractor in accordance with the criteria of Paragraph 5', or it shall be rewarded to another LCC.

Article 4 (PDO document, C7 Section) suggests the following steps to elaborate on a detailed plan for LCCs. The following remarks are important to comply with the public procurement or tender:

- Minimum 10% subcontract to LCCs: (a) as a % of the contract price: for contracts with a fixed price; and (b) as a % of the expenditure: for contracts where the price isn'tpredetermined.
- Follow detailed inter-bidding process. Contractors must use the selection process described in Paragraph 5 for LCCs.
- Award specific scope to LCCs. Some work scopes are to be included in the 10% LCC allocation.
- Identify additional work for LCCs if needed. If initial work is below 10%, find more to fulfil the requirement.
- Propose further work categories for LCCs. It is encouraged to suggest additional work that could be suitable for LCCs, beyond the base 10%.
- Contractor manages LCC performance. Contractor is responsible for ensuring LCCs' work quality, adherence to schedule, and HSE compliance.
- Provide amenities and space for LCCs. It is required to ecquip LCCs with necessary facilities and utilities to enable them to work efficiently.

- Adjust LCC contract value for variations. If there are contract changes, modify the LCC work value accordingly.

Inter-Bidding Process for SME and/or LCC Subcontractors[26]

BGeTS is required for all associated tender operations by contractors overseeing SME or LCC subcontracting, guaranteeing an open, equitable, and auditable procedure. After a contract has been completed, tenders ought to be released with complete documentation and equitable treatment during the rounds of appraisal and tendering. Subcontracts must be explicit and comprehensive, featuring clauses pertaining to fair conditions of payment and assistance in the growth of SMEs and LCCs. Long-term partnerships are prioritized over cyclical, short-term contracts, which relieves the administrative and financial strain on SME/LCC subcontractors. The following 12 procedural steps are required to fulfil this condition:

1. Use BGeTS for inter-bidding. For SME/LCC tender procedures, contractors are required to utilize the Business Gateways eTendering System (BGeTS).
2. Post-contract tenders. Only after the company and contractor's contract has been finalized may SME/LCC tenders be launched.
3. Adhere to specific tendering procedures. Contractors are required to guarantee a fair and reasonable tendering procedure, and tenders must be published through BGeTS and registered with Business Gateways.
4. Assess tenders equitably. Contractors must record all inquiries and assess bids utilizing pre-established models, giving all bidders an equal chance to elucidate and correct their submissions.
5. Record disqualifications. Unsuccessful bidders are entitled to a debriefing, and all grounds for disqualification must be documented.
6. Negotiate only when it is needed. Post-bid price negotiations are only allowed in cases when there is only one bid that is technically acceptable.
7. Obtain approval for non-lowest bids. Contractors must obtain company approval if they want not to award to the lowest acceptable bid.
8. Subcontract provisions. Complete subcontracts with all the necessary information, such as a development strategy and explicit terms for payment.
9. Limit additional subcontracting. Make sure that an SME or LCC follows Omanization percentages for any additional subcontracting.

26. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 5.

10. Release bids in line with contract document. This makes it possible to audit and report on the SME/LCC tenders related to the contract (PDO document, Section C7).

11. Give long-term commitments. To cut down on frequent, low-value retenders, try to award SME/LCCs longer-term subcontracts.

12. SME/LCC subcontractors are exempt from submitting performance guarantees or tender bonds. These subcontractors are not required to submit bonds.

ICV Reporting and Audit[27]

Within 21 days of the contract start date, the contractor must submit their In-Country Value (ICV) plan utilizing the ICV Monitoring & Reporting System in the format required by Section C5 (C7 Document, Schedule G of the contract). Unless the company approves revisions, this initial submission must match the data submitted during the tendering process. The company will offer login credentials after the contract begins.

The contractor is then expected to use the same system to report actual ICV performance on a regular basis. Since the company has the authority to audit these data or assign the audit to a third party, the reported ICV data must be genuine and accurate. Throughout the operational time, the contractor is required to submit regular updates on the ICV plan commitments and to provide thorough ICV performance reports upon the company's request.

Contractors are also in charge of gathering, processing, and securely storing ICV data from manufacturers and subcontractors and supplying duplicates to the company as needed. For SMEs and LCCs, quarterly performance reports that are shared with the company and appropriate support channels must contain comprehensive financials, a scope of work, and a variety of performance measures, including HSE performance and Omanization percentages.

To efficiently track ICV compliance, the company can audit all relevant records and data, such as evaluation findings, tender records, and contract award explanations. This privilege includes access to documents pertaining to Omani and non-Omani contractors working on the project, guaranteeing openness and compliance with agreed-upon duties on ICV contributions (PDO document, Section C7).

27. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 6.

Remedies[28]

In order to meet ICV requirements, contractors must create subcontracts with SMEs and LCCs. In the case that these obligations are not fulfilled, contractors are required to provide a remediation plan within 30 days of being notified. Once approved, the plan shall be implemented right away. Any delay longer than two months warrants a high-level evaluation and potential plan change. Regardless of corrective actions taken, penalties are imposed from the moment of default. At the company's discretion, severe or persistent non-compliance may result in payments being withheld, mandated compliance alternative conversations, or reduced obligations. Recovering unallocated cash at contract termination and perhaps being suspended or barred from future contracts are additional penalties. Specific penalties, such as the removal of non-compliant awards from official records and operating restrictions on service entries until compliance is restored, are also imposed for non-compliance with the bidding system or ICV reporting (PDO document, Section C7).

Oil and Gas Industry 1.2% Training Levy[29]

Major oil and gas companies were instructed to implement a 1.2% training levy by the Ministry of Energy and Minerals (previously the Ministry of Oil and Gas) on November 11, 2018, with effect from January 1, 2019. This tax, which is subtracted from contractors' invoiced amounts, funds training programmes for skilled and semi-skilled positions in the oil and gas industry with the goal of expanding employment prospects for Omani workers (PDO document, Section C7).

Transfer and Development of Omani National Personnel[30]

Contractual agreements explicitly specify the important components of the transfer and redeployment of Omani national personnel upon contract initiation or expiration. As part of their mobilization and transition plan, the new contractor will coordinate the transfer within six months, and Omani employees of the incumbent contractor may initially transfer to them if released. The contract fee includes all expenses related to these transactions.

The redeployment procedure includes locating alternative employment options for Omani staff members inside the contractor's organization or affiliated companies upon

28. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 7.
29. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 8.
30. This section is based on the PDO source: Petroleum Development Oman L.L.C., Section C7 – In-Country Value (ICV), Paragraph 9.

contract termination or expiration. In compliance with labour regulations, this entails giving three months' notice of prospective releases to the Redeployment Committee of the Ministry of Labour.

It is assumed that contractors will proactively look for ways to repurpose workers, provide them with additional training or skills, and ensure that local laws are followed to maintain the workforce's employment. The contractor is required to provide a report to the Redeployment Committee outlining efforts made, the future actions for affected people, and any compensation that may be owed for termination if alternative roles cannot be secured (PDO document, Section C7).

Calculation of ICV: Cross-Country Comparison

The following regional evidence must be understood to comprehend the significance of ICV for the GCC countries, including Oman. The labour market in the region is divided into two primary parts due to the region's reliance on oil and gas revenues: government or public jobs, and private jobs (Mina, 2020). Most graduates across these countries prefer careers in the government sector. However, according to Al-Jawhari *et al.* (2020), GCC countries are actively transforming their economies to decrease dependency on the oil and gas sector by embracing national development strategies that focus on diversification and local capability building. Great examples are countries like Saudi Arabia's Vision 2030 and Oman's Vision 2040, which prioritize sectors such as manufacturing, tourism, defence, logistics, education, and human development to create high-quality jobs and develop promising industries.

Moreover, throughout history, the GCC has relied on foreign expertise and labour, but has since shifted to emphasize local employment, particularly in vital state institutions. With the economic growth caused by the oil boom of the 1970s, localization efforts expanded, with policies to increase procurement from local businesses, though early attempts faced governance and measurement challenges (Al-Jawhari *et al*., 2020).

Al-Jawhari *et al.* (2020) argue that economies like the UAE, Saudi Arabia, Oman, and Qatar have started transforming their localization strategies, aiming to increase local employment in the energy sector and to support local goods and services, enhancing local supplier capabilities. Although current initiatives focus primarily on the energy sector due to its economic weight, there is significant potential to extend these strategies across the public sector. Learning from the energy sector's experiences and applying these strategies more broadly can further advance GCC economies.

To understand better how much value is added to overall localization (ICV addition), Al-Jawhari *et al.* (2020) provide guidance on how to calculate the in-country added value of government spending.

The method assigns a "percentage score" to suppliers who take part in public sector contracts in order to calculate their overall local value added. In the procurement process of each government organization, suppliers will be assessed not only on the basis of their localization scores but also on their bid pricing. *A greater localization score will make a provider more competitive in the bidding process, but bid pricing and the localization score must still be balanced.*

The following formula is provided below:

$$\%\ \textbf{Localization Score} = \frac{\text{Total In-Country Spend}}{\text{Revenue or Cost}}$$

Eq. 1

It is believed that the methodology for calculating the ICV is subject to change as dynamics in economy diversification continues.

Regional (GCC) ICV Formula Scores

Four GCC countries (United Arab Emirates, Saudia Arabia, Qatar, Oman) adopted a different scores formula to calculate the ICV values in each country. The following table represents the parameters included in each country's oil and gas companies.

As shown in Table 6.1, each of the four companies has created a unique scoring system to measure the In-Country Value (ICV) of a bid quantitatively. They have diversified their ICV priorities into various elements, each with a specific weight, and these are summed to form a total score.

The key differences between these formulas are the number and nature of the individual components, the weights each component receives, and how the overall score is measured. A deeper comparison would need a closer look at how each company defines these components in their formulas, but such details are not publicly disclosed due to confidentiality. The formula used by PDO for calculating the ICV score is due for a revision to better align with the ICV strategic pillars and the goals of Oman Vision 2040.

Table 6.1: Cross-country ICV measurement

COUNTRY/ COMPANY	EQUATION AND ITS PARAMETERS
Oman/ **PDO**	ICV = (A1 x 20% + A2 x 0%) + (B1 x 80% + B2 x 20%) + (C1 x 70% + C2 x 18% + C3 x 6%) + (D1 x70% + D2 x 10%) Eq. 2 A1: Future investment A2: Existing investment B1: Compensation to Omani workforce B2: Compensation to expat workforce C1: Made in Oman goods C2: Supplies from nationally registered companies C3: Supplies from foreign registered companies D1: Services by nationally registered 3rd party D2: Services by foreign registered 3rd party
UAE/ **ADNOC**	ICV =(A x 50%) + (B x 50%) + (C x 25%) + (D x 15%) + (F x 10%) Eq. 3 A: Goods manufactured (only for suppliers holding industrial licence) B: 3rd party spend (only for suppliers holding non-industrial licence) C: Investment D: Emiratization E: Expatriate contribution F: Bonus: Revenue from outside UAE, Emirati head count, and investment growth
Saudia Arabia/ **ARAMCO**	Iktva = ((A + B + C + D + R) / E) + I Eq. 4 A: Incorporates comprehensive details of goods & services, amortization and depreciation of invested CAPEX, and expat compensation B: Saudi workforce compensation C: Training and development of Saudis D: Supplier development R: Local research & development E: Total in-kingdom costs I: (New) includes incentives: exports, environment social governance, cybersecurity, regional headquarter programme
Qatar/ **QE**	ICV = (A + B + C + D) / (Contract Value) Eq. 5 A: Goods and services B: Workforce training C: Supplier development D: Investment in fixed assets

Source: Wealth Oman (2024, p. 43)

The general implications of ICV are significant with positive effects being seen in various areas (KPMG, 2024), like the following:

Local development. ICV involves local stakeholders in public projects, fostering growth at municipal, city, or regional levels.

Enhanced local business engagement. ICV encourages local businesses to lead in community development, providing opportunities for skilled, unskilled, and professional workforce participation.

New job creation. ICV projects require small and medium-sized enterprises (SMEs) and other businesses to commit to societal employment responsibilities.

Lifelong learning. ICV projects support ongoing education and professional development for all levels of employees.

Support for local products and services. ICV prioritizes local producers and service providers nationwide.

Socio-economic advancement. ICV aims to involve all relevant stakeholders in national development, enhancing the entrepreneurial ecosystem, business infrastructure, and overall living standards.

Within the Omani context, the ICV projects seem to remain important pillars in the socio-economic development of the country through the Omani Vision 2040 national strategy.

Chapter Summary

This chapter discusses and reviews the In-Country Value (ICV) project and its main concept. The ICV project is structured around four main pillars: investment, labour, products, and services. These pillars are crucial for achieving the project's goals of maximizing the utilization of national assets to foster a self-sustaining economy. It emphasizes the project's significance in the Omani context, where Petroleum Development Oman (PDO) is the main player in shaping the ICV's practices. It details how the ICV project enhances local labour participation and the production of goods and services. The technical (T3) and commercial (C7) evaluations are explained in depth, highlighting their importance in ensuring the project's success. The chapter concludes by discussing the general implications of the ICV project for Oman and describes teaching resources to aid in comprehending technical and commercial tender evaluations.

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Keywords Index:

A
Activities
Advancement
Assets

B
Bidding
Bidders
Business

C
Career
Challenges
Collaboration
Commitment
Contractors
Coordination
Criteria

D
Demands
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Directive
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E
Economy
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Enhancement
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Expenditures

F
Fairness
Features
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G
Goals
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Gulf Cooperation Council (GCC)

H
Hub
Human
Hypothetical

I
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Importance
Industry
Infrastructure
Innovation
Integrity
Investment

J
Job

K
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Lifelong
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Multi-level

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P
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Payments
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R
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Resilient
R&D
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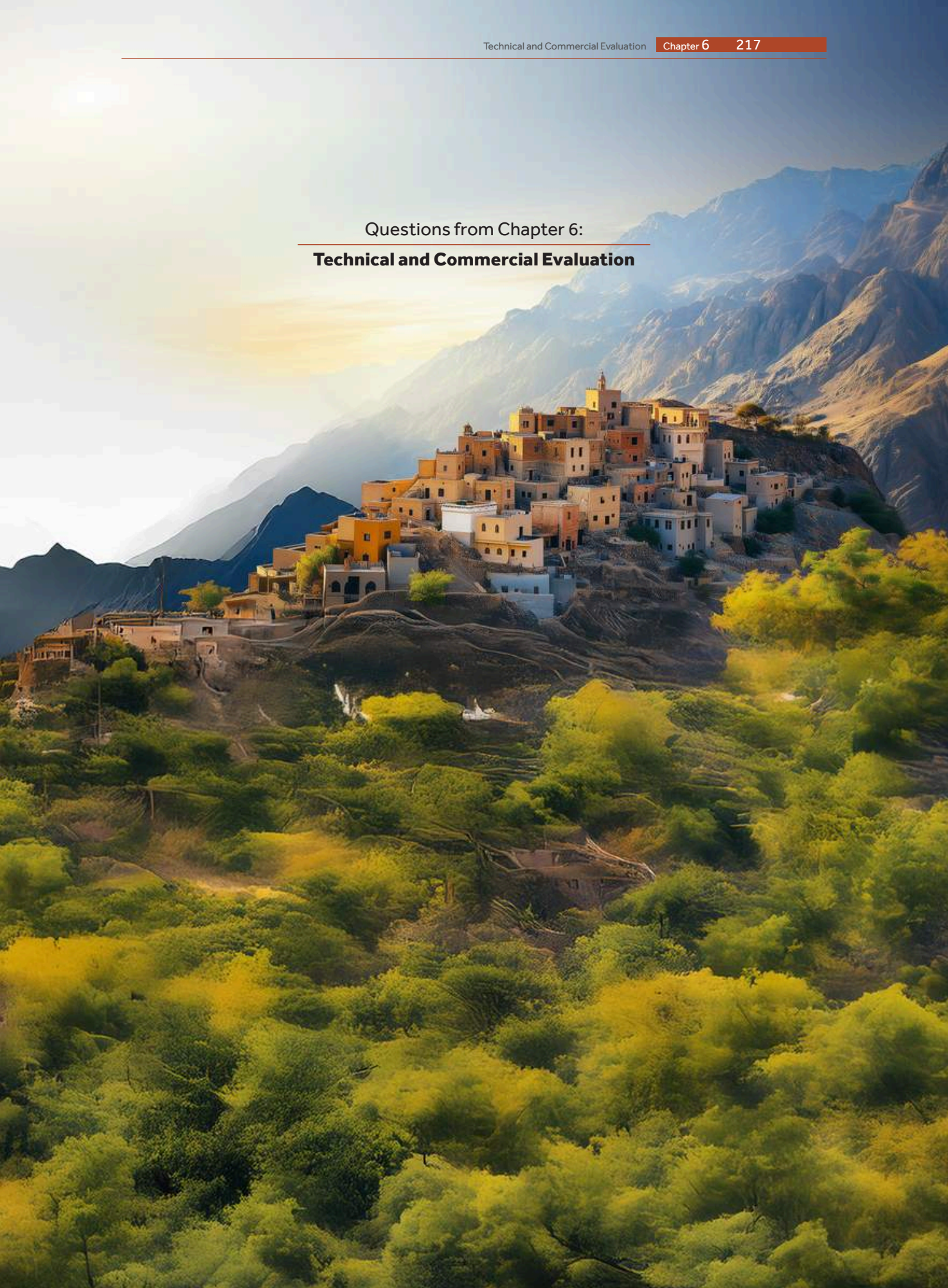
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Suppliers
Sustainable

T
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Training
Transfer

U
UAE
Understanding
Unemployment

V
Value
Variables
Vision

W
Wealth
Wellbeing
Work
Workforce



Questions from Chapter 6:

Technical and Commercial Evaluation

A. Multiple Choice Questions

1. ICV projects contribute to national GDP via procurements processes. What is the contribution percentage to GDP globally attained through public procurement?

A. Between 12-15%

B. 5-10%

C. 15-20%

D. Over 20%

2. According to the chapter, there are main objectives of the ICV. Which best describes the main objective of the ICV in the chapter?

A. Tax revenue increase

B. Public spending reduction

C. Improving living standards and socio-economic development

D. Privatization and use of public assets

3. The ICV Project's aim in Oman is:

A. Increasing in imports in Oman

B. Fostering local economic growth through tendering in Oman

C. Decrease in technological capabilities in Oman

D. Promoting foreign employment in Oman

4. Which one is NOT the main principle regarding the tendering policy?

A. Non-discrimination

B. Integrity of competition

C. Procedural transparency

D. Preferential treatment to local companies

E. None of the above

5. The focal point of the ICV Project is_____.

A. To maximize use of national assets and abilities.

B. To encourage foreign investments only.

C. To centralize economic activities.

D. To export.

E. None of the above.

6. ICV Project enhances local supplier networks. It does through_____.

A. Reduction of the number of local suppliers and their capacity.

B. Promotion of complete dependence on foreign suppliers.

C. Strengthening local suppliers by developing their capacities to meet industry demands.

D. Restriction to local suppliers.

E. All of the above.

7. ICV projects facilitate technology and knowledge transfer by:

A. Limiting partnerships with global companies.

B. Establishing agreements with knowledge and technology share.

C. Discouraging foreign workforce from returning home.

D. Nationalizing of all industries.

E. None of the above.

8. ICV Project in Oman affects job creation. What would a direct effect of the ICV Project?

A. Increased dependance on imports

B. Lower unemployment and underemployment rates

C. Local or domestic talent reduction

D. Decreased education level of the country due to decreased education investment

E. None of the above

9. ICV projects usually include development of skills, know-how, and knowledge. This implies:

A. Collaboration with academic institutions.

B. Discouragement of apprenticeships and internships

C. Reducing job-related education.

D. Increase of outsourcing.

E. Options A and D are both correct.

10. ICV Plan can influence investment in fixed assets within Oman. It is influenced by?

A. Discouraging capital investments.

B. Past capital investments.

C. Budgeting CSR expenses.

D. Focusing on foreign investments.

E. All of the above.

11. In accordance with PDO Document C7, what is required for SME participation in public procurement or tendering?

A. Awarding a maximum of 5% of work to SMEs

B. Encouraging additional SME categories beyond the 10% commitment

C. Discouraging long-term commitments to SMEs

D. Avoiding the pre-qualification questionnaire for SMEs

E. Awarding a maximum of 7% of work to SMEs

12. According to the text, what kinds of obligations are required on contractors in relation to LCCs?

A. Provide at least 5% of subcontract work to LCCs

B. Assign at least 10% of their project work to LCCs

C. Exclude LCCs from Omanization targets

D. Prevent LCCs from participating in bidding processes

E. Assign at least 11.5% of their project work to LCCs

13. According to the text narrated by PDO in regards to SME or LCC subcontracting, what system is used for tender operations?

A. The Global eTendering System

B. The Business Gateways eTendering System (BGeTS)

C. The Local eTendering Network

D. The International Tendering Platform

E. All of the above

14. What are contractors expected to submit within 21 days of contract start date?

A. ICV reduction plan

B. A performance bond

C. Their ICV plan using the ICV Monitoring & Reporting System

D. A new tender proposal

E. There is something else but not the above ones

15. According to the Ministry of Energy and Minerals, what type of fee/levy/charges do the big oil and gas firms impose?

A. Environmental levy

B. Export levy

C. Training levy

D. Import levy

E. Option B and option D

16. The text shows the importance of ICV in GCC countries. Which one, among others below, is most likely reason to you?

A. They are trying to increase their dependency on oil and gas revenues

B. They aim to decrease diversification of their economy

C. They are actively transforming their economies to reduce dependency on oil and gas

D. They wish to import more foreign labour

E. None of the above

17. How would you associate PDO to calculate the ICV score?

A. UAE/ADNOC

B. Saudi Arabia/ARAMCO

C. Qatar/QE

D. Oman/PDO

E. No association at all

18. By recalling the content of the chapter, what would be possible implication of ICV Programme?

A. Slow of local development

B. Reduction in local business engagement

C. Decrease in new job creation

D. Support for local products and services

E. All of the above

19. According to the text, calculation of ICV in Omani context has_____.

A. 4 parameters in the formula.

B. 5 parameters in the formula.

C. 8 parameters in the formula.

D. 9 parameters in the formula.

E. only 3 parameters in the formula.

20. GCC countries, like Saudia Arabia, United Arab Emirates, Qatar developed their own ICV formula. According to the text their formula contains_____.

A. Less parameters than the Omani ICV formula.

B. More parameters than the Omani ICV formula.

C. Equal parameters than the Omani ICV formula.

D. Some of countries less some more parameters in their formula.

E. None of the above is true

B. Short Questions

1. What are the primary components of the T3 document in the ICV Project's technical evaluation?

2. How does the C7 document contribute to the commercial evaluation of ICV projects?

3. What criteria are used to assess the technical aspects of tender submissions in the ICV Project?

C. Long Questions

1. Discuss the role of the ICV Project in promoting socio-economic development in Oman, focusing on its main pillars. How do these pillars contribute to the overall goals of the ICV?

   Explain the importance of the T3 and C7 documents in the evaluation of ICV projects. How do these documents ensure the effective implementation of the ICV strategy?

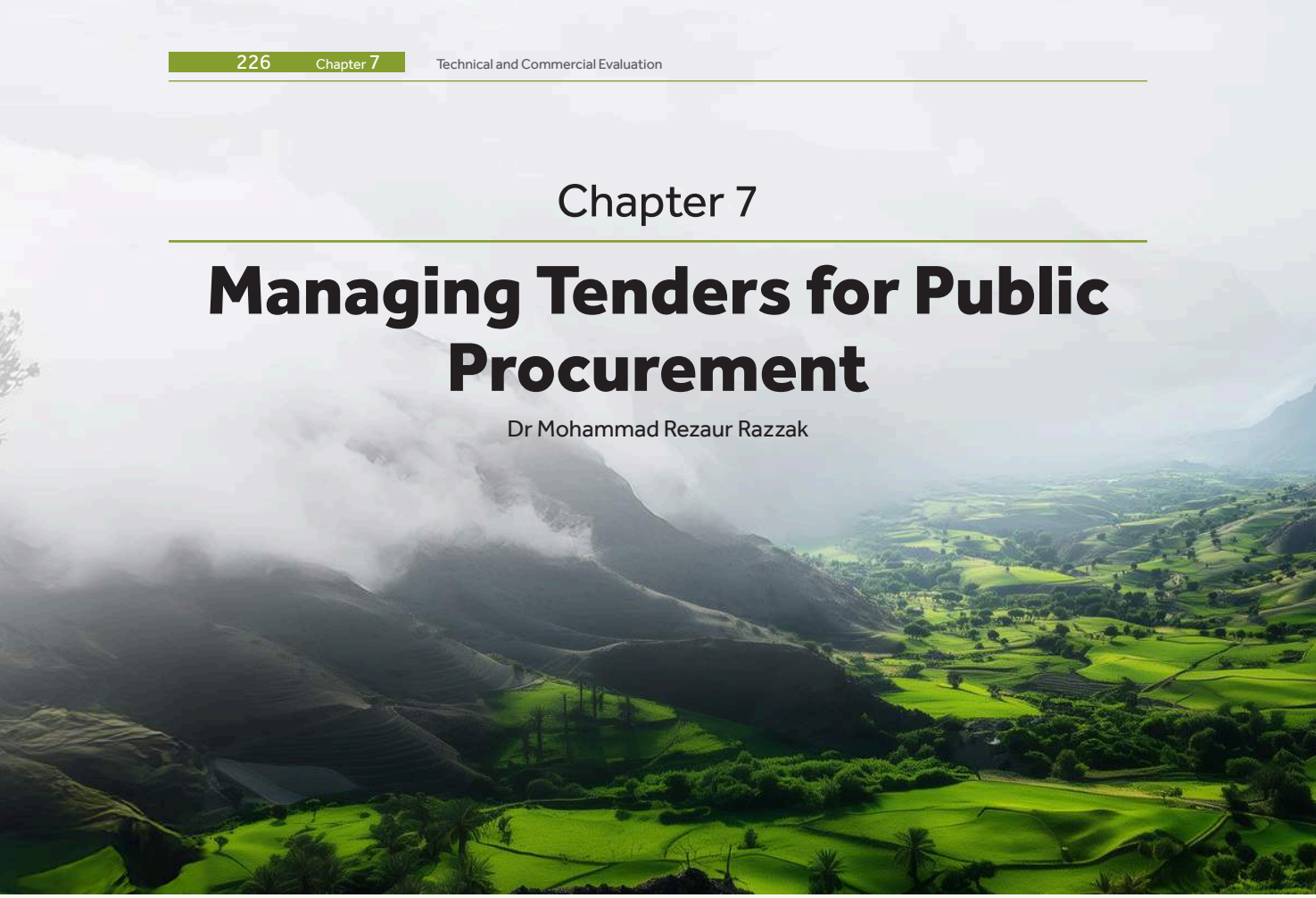
D. Case Studies

Case Study 1: Assessment ICV Project Through Economic Tendering Value[1]

As a PDO Project Manager, you are managing a recent ICV Project Call, the bid submission process, which takes three months submission period. Your team is working hard to evaluate and brings on you table the best ones.

There were 39 responses (39 bidders in total) to this call. Among the 39 bids received, there was a range of quality offers, though many lacked either a valid Entrepreneur Card or complete documentation. Two months post-submission deadline, you and your team have scheduled the release of procurement results. Your final decision will be based on the evaluation reports, and you have summarized key information from three distinct bidders to identify the most promising candidate for PDO. The details of these bids, which will inform the final decision, are as follows.

1. The case study is written by the author as a fictive one in the field of tendering and procurement within the context of Oman. Tables are adopted and adapted from Hadi, A. (2024)



Chapter 7

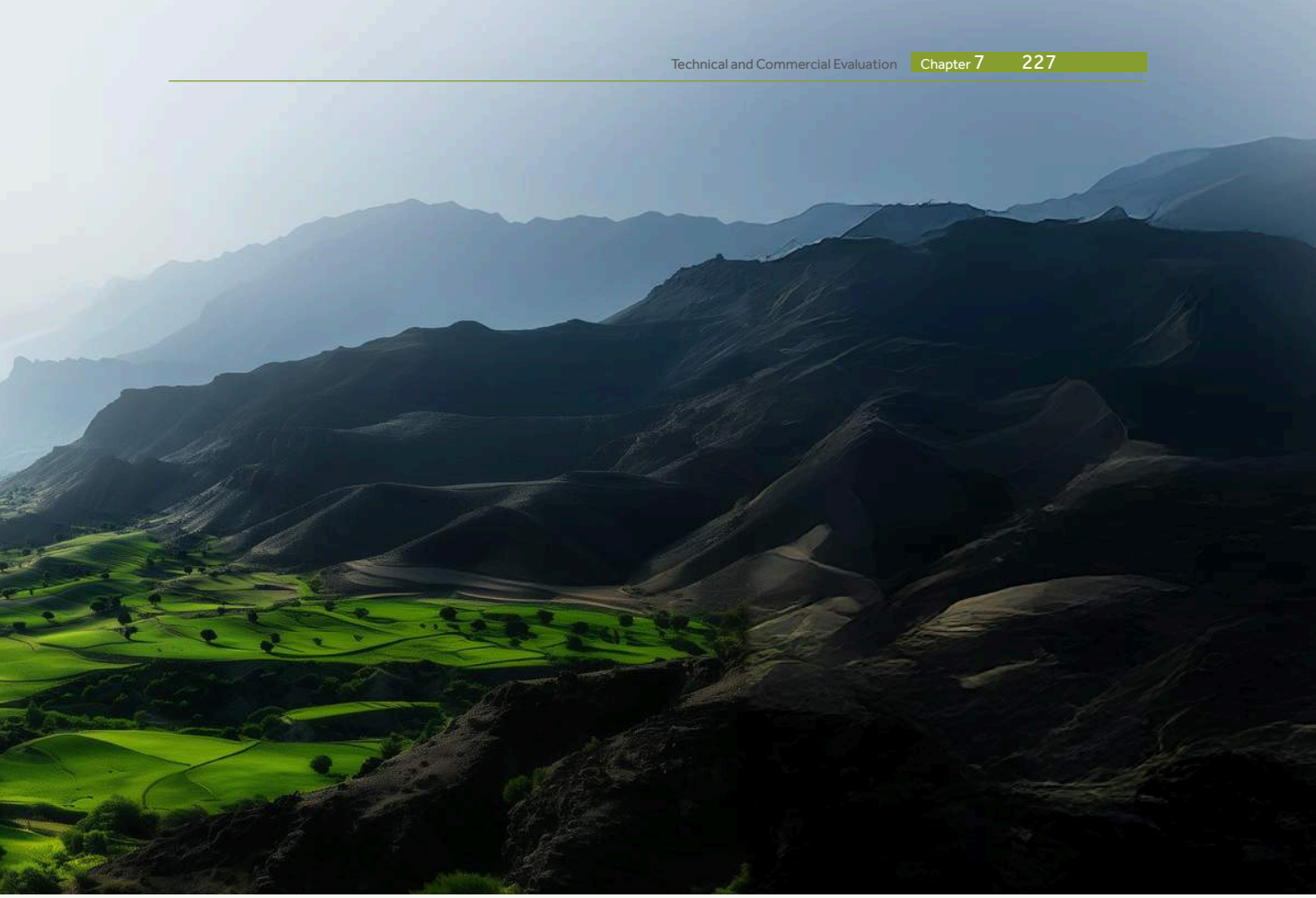
Managing Tenders for Public Procurement

Dr Mohammad Rezaur Razzak

Abstract

The primary goal of this chapter is to discuss key issues concerning the processes involved in tendering and supplier selection in the context of both local procurements from within Oman and international procurements from outside the country. It explains different critical elements of the tender procedure with the goal of enabling decision-makers to match between supply and demand in compliance with policies stipulated in the rules and regulations of the country regarding tender procedures for public organizations. Specific challenges regarding supplier selection in public tenders are presented for decision-makers to develop sufficient insights from the bids to identify a contractor that is the best fit for the goals of the organization. Thereafter, this chapter delves into the flexibility of supplier selection models with a view to giving the organization some manoeuvring space to select the best fit for the work and the organization. Next, a nine-step supplier selection process is discussed that can be used by public enterprises to indicate their preferences with the aim of having a positive influence on both the quantity and quality of the bids. Finally, the chapter concludes by explaining how the objectives and views of the buyer are crucial to make the tender process as transparent as possiblen.

Keywords: *ICV, tendering processes, public procurement, supplier selection, bid evaluation*



Learning Objectives:

- To understand the social rationale behind using tendering as an approach for public procurement decisions.
- To analyse how organizational supply and demand may be optimized in a tender process.
- To understand challenges related to public procurement in the process of selecting the best bids.
- To evaluate how "supplier selection models" are applied to a specific context.
- To analyse the contrasts between absolute and relative scoring methods in bid evaluation.
- To evaluate the nine steps in a supplier selection process.
- To understand tendering guidelines in the Sultanate of Oman.
- To analyse real-world case studies related to tendering.

Introduction

Tendering is a process that is widely deployed around the world by most public organizations and by many large business enterprises and non-government organizations. The process is aimed at bringing transparency and accountability to the important function of procurement of goods, services, and works needed by an organization (Hammer & Andhov, 2021; Ronnback, 2012). In the process of tendering, crucial decisions are involved in awarding a contract to a certain contractor or supplier that often involves large transactions between the two parties based on specific deliverables. Typically, the process contains terms of reference and standard operating procedures that must be followed by bidders (those contractors or suppliers that wish to win the contract) and adhered to by the procuring organization. Such documented procedures ensure that prior to the submission of the offer (bid), the contractor or supplier is aware of the minimum threshold requirements for being an eligible supplier and the manner in which their bids will be evaluated by the tendering organization (the tenderer) (Harland *et al.*, 2021). The whole process is aimed at fostering acceptance and legitimacy of the entire procurement process. Although tendering is widely used by large private businesses and non-government organizations for the sake of transparency, however, it is typically mandatory for public organizations for procurements beyond a certain value (Kelly *et al.*, 2021).

As a result of numerous scholarly discourses presented at UNCTAD (United Nations Conference for Trade and Development), the new recommendation for public procurement is that it should be less focused on price and more on value for the organization, which renders the designing of supplier selection processes more complex (Work Bank, 2024). Moreover, different stakeholder groups may hold different views on which part of the procurement is important, and they may also have preconceived notions about who will be the best vendor to collaborate with, and decision-makers that ought to be involved in the award decisions. Such natural divergence of stakeholder views tends to make public procurements more complicated; hence, a well-designed tendering process plays a critical role in mitigating conflicting views and creating legitimacy through an accountable process (Kelly *et al.*, 2021).

The subsequent sections of this chapter delve into the following topics. The chapter explains how the tender process facilitates rational managerial decision-making and complexities in the tendering procedures in order to ensure transparency and acceptability for all stakeholders. Then, it will look at matching demand with supply. Then it presents discussions on tendering procedures. Section 7.5 identifies some supplier selection methods. The chapter further discusses how to ensure acceptability of the evaluation process. Finally, it presents an overview of general guidelines for tendering processes in the Sultanate of Oman for both local and international procurements. The subsequent parts of the chapter present two case exercises along with related

questions for readers to understand the intricacies of tendering processes in the case of both local and international transactions. Finally, a few short and long questions are presented that enable readers to gauge the depth of insights they have gained from this chapter.

Rationale of the Tendering Process

One of the most widely adopted guidelines for public tender processes in developed economies is the *OECD Public Procurement Recommendation* (Grandia, 2018). The Organisation for Economic Co-operation and Development (OECD) is comprised of 38 countries, considered to be high-income nations. This organization has taken significant steps in creating an internationally acceptable benchmark for public procurements with the idea of standardizing tendering procedures in member countries, and for other non-member countries to emulate. The principles of public procurement developed by the OECD emphasize the ideals of equality, transparency, diversity, and proportionality that are applicable to all the supplier selection models used by public organizations.[1] These foundational principles call for the execution of policies developed to ensure that public procurement processes are aligned with practices of good governance (Schontanus, 2023). Despite the existence of such global guidelines, the implementation of these principles may at times conflict with the other organizational rationalities and objectives that are crucial during procurement processes. Nevertheless, tendering as a process for public procurement plays a significant role in bringing some alignment between the foundational principles of fairness and some divergent goals of the procuring public organization (Volker & Schontanus, 2023).

The underlying rationale behind achieving a globally accepted standard for public procurements through tendering is enabling unhindered movement of goods and services that would ultimately benefit all citizens. The uncertainty and complexity of supplier selection particularly for large public procurements make it seem difficult, which may cause ambiguity in the goals and implementation of a tendering process. In such an uncertain context, the use of a structured aggregation system could give some degree of fairness to the process (Volker & Schontanus, 2023). As a result of the dynamics of the organizational context in which decisions are made, changes could take place in the basic assumptions that were framed orginally in the call for proposals. From a rational viewpoint, the procuring entity needs to be aware of the nuances that are part of the nature of awarding a contract and be able to convey them to the potential bidders through the tender documents (Milosavljevic *et al.*, 2019).

1. Source: https://www.oecd.org/gov/public-procurement/OECD-Recommendation-on-Public-Procurement.pdf.

From the perspective of inclusivity and encouraging more participation from bidders, rigidities in tendering processes may pose some challenges, such as the buyer realizing the shortcomings in their RFP (request for proposals) only after receiving the proposals submitted by the suppliers. For instance, a high benchmark for sustainability compliance may restrict the number of eligible suppliers, thus limiting competition. Another pertinent example is that a proposed solution by tenders is costlier than was estimated by the procuring organization when they prepared the budget for the tender. If such scenarios emerge, then the buyer may be forced to cancel the tender and go for retendering by deploying multiple award criteria or an increased budget (Ishak & Thiruchelvam, 2024). These are not easy decisions since a retender takes more time and increases the transaction costs for both buyers and suppliers. Moreover, many eligible bidders may lose interest in pursuing the tender once a tender is cancelled.

Complexities of Decision-making in Tendering

Decision-making in procurement through tenders emphasizes how people decide in practice and the situational characteristics that influence these processes. For example, it could be that the information disclosed in the tender documents on which the requirements of the buyer are founded may become irrelevant by the time a final decision is made about the awarding of the contract. This complicates the selection of the criteria for decisions and allocation of weight to the criteria. Moreover, when the buyer uses restricted or open procedures with a conventional contract, the decision options may be driven by the bidders, thereby limiting the probability of the procuring organization influencing or controlling these options. Therefore, making sense of the decision to procure starts with translating the aims of the buyer into the tender documents by understanding the competitive environment surrounding the potential bidders. During this assessment process, the procuring organization needs to analyse the distinct elements of the domain of operation of the supplier to understand the level of competition that exists for a particular procurement (Schotanus, 2023). Nevertheless, decisions based on the quality of an offer always result from the interaction between the decision-makers in the buying organization and the alternatives proposed by the suppliers. The following case illustrates such a situation.

CASE STUDY 1: Dilemma in Tender Process Due to Altered Specifications

A local municipal authority in a mid-sized town in Canada decided to build a new city hall building. They advertised a tender calling for proposals from architectural firms asking for proposed designs and cost estimates. At the same time, the head of the municipal authority decided to obtain suggestions from all the employees about their expectations from the design, and the feedback received showed that each employee was expecting a separate room for themselves that would lead to a significant number of square metres in horizontal area. This created a lot of internal debates and office politics. To deal with the internal confusions and keeping the budget in mind, the senior decision-makers decided to adopt the shared office space concept for most employees. Moreover, the local public library would also have a space in the building as they were contributing to the budget. These changes complicated the matter, because the call for tender had already been issued, and most bidders had already submitted their offers, and now the design parameters had been altered.

To address the situation, the mayor decided to form a special committee comprising procurement managers from the organization and experts from outside to make recommendations to the mayor. During the assessment process by this committee the members first verified to what extent the submitted offers met all the desired criteria mentioned in the original tender documents. Thereafter, they checked to what extent there was flexibility in the proposals to accommodate the new changes suggested to the design. The initial evaluation showed that the most experienced bidders provided designs and estimates that did not match design modifications that were recommended after the tender had been issued. During the meetings, it was evident that the employees of the municipal authorities were more concerned with the benefits they would get from the design, whereas the external members were more focused on the transparency and fairness of the process. After much intense debate, finally a report was sent to the mayor. Based on the report, the mayor decided to cancel the tender and advertise a new call for proposals. This decision would delay the start of the project; however, it would ensure that there were no ethics complaints by the bidders or other stakeholders.

Source: Casady et al. (2019)

Procurements from Local and International Vendors

Public procurement laws and guidelines typically cover all types of procurements, whether they are done by local suppliers or from outside the borders of the country (international). The standard procedures and regulations are usually sufficient for public procurement bodies to use in both local and international contracts for goods/services or works/projects. However, when tender evaluation committees assess the match between the buyer's objectives and the potential supplier, they must consider certain essential differences, such as laws to which the supplier will be bound when they are from a foreign country. Therefore, the question arises as to how contractual obligations will be enforced if some dispute arises. Normally, most tender contracts have arbitration clauses; however, the buyer must consider worst-case scenarios when the contract awardee wilfully or involuntarily decides to violate clauses in the purchase contract. Hence, it is often more advantageous for organizations to execute award contracts with local suppliers or local agents of international suppliers, rather than direct contracts with organizations outside the country's borders. Table 7.1 presents some advantages of purchasing locally or through local agents of international organizations, instead of outright procurement contracts to international suppliers.

Table 7.1: Potential advantages and disadvantages of procurement from local suppliers or local agents of international firms

No.	Advantages	Disadvantages
1	*Speed of communication:* Local companies* can quickly respond to queries and often make on-the-spot decisions to expedite contract execution.	*Slow or confused communication:* If the staff working in local firms are not well trained or inexperienced, they are unlikely to be able to respond effectively to queries and requirements of the buyer.
2	*Cost-effective local supplies:* Local companies can locate locally developed solutions to many elements of the supply that may be less costly.	*May increase costs:* Most local agents charge a commission for their services that is added by the principal to the price of the contract.
3	*Expedient delivery:* Local firms may be able to deliver smaller quantities quickly and more frequently, where the buyer does not have to maintain large levels of inventory.	*Default on order due to financial instability:* Often local firms that are not financially strong may default on the contract. Moreover, if large amounts of bid bonds or performance bonds (i.e. bank guarantees) are required, they may not be able to provide them.
4	*Emergency supplies:* Local firms can respond rapidly to any emergency requirements of the buyer.	*Challenges in decision-making:* In complex projects or supplies, the local firm may be over-dependent on their foreign principal, making it difficult for them to meet all the technical needs of the supply.
5	*Greater legal recourse:* The fact that the suppliers are based in the country of the buyer enables the buyer easier access to legal recourse if any contract enforcement or dispute arises.	*Risks to secrecy:* In sensitive contracts, employees in a local firm may disclose sensitive secrets of the contract. In such cases, it may be better to deal directly with the foreign vendor.

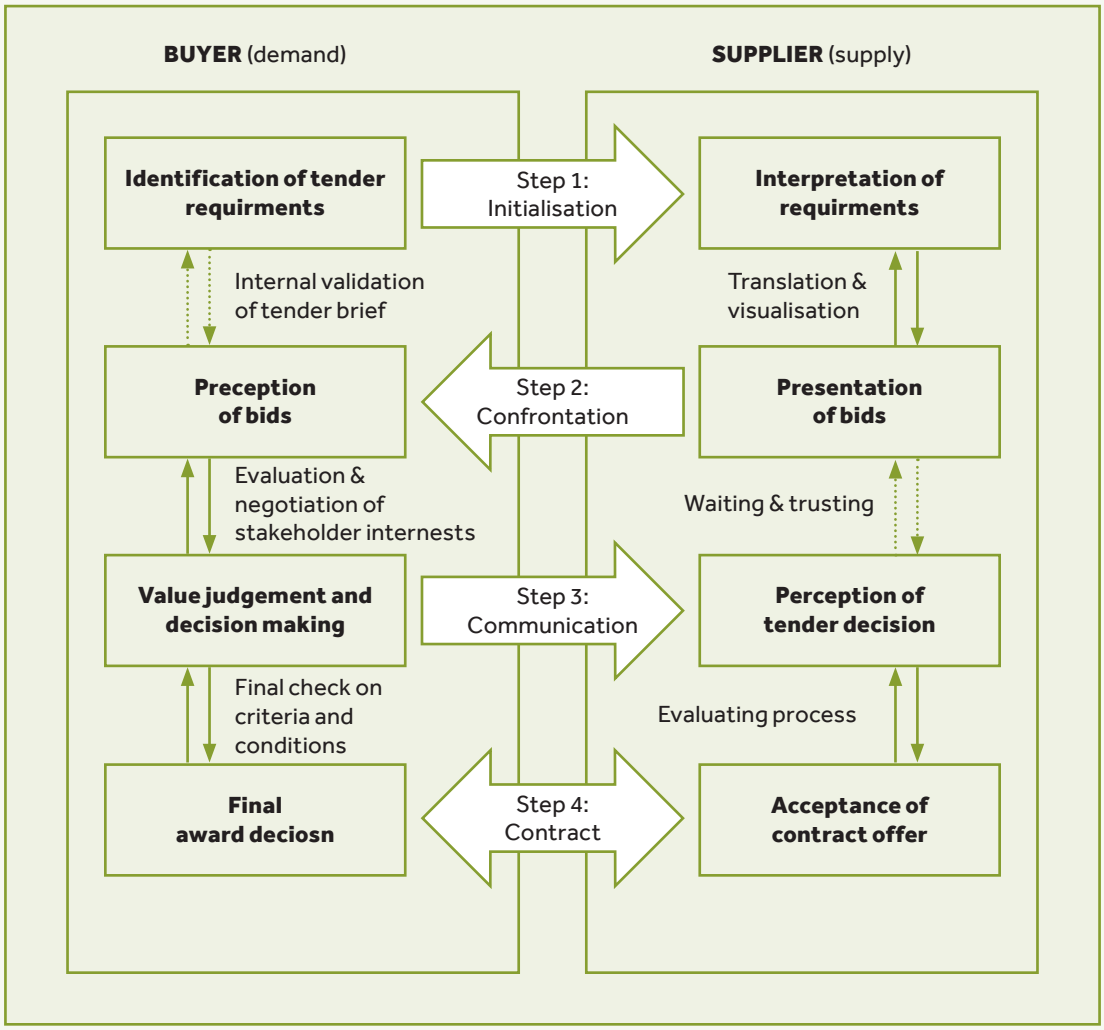
*Local companies or agents of foreign companies with registered offices in the home country of the procuring organization

Aligning Demand with Supply

It is crucial to understand that during the tendering process, the needs of the buyer (i.e. the demand aspects) are properly matched with the offer made by the bidder (i.e. the supply side), which in turn must be aligned with specified objectives and plans of the organization mentioned in the tender (Yoon, 2023). This alignment process is an interaction between the supply side and the demand side, as shown in Figure 7.1. The left column in the figure depicts the steps in the decision-making process from a buyer's viewpoint, beginning with the outlining of the requirements of the tender and criteria to be included in the relevant documents (step 1). These criteria are to be based on demand and market realities. This means that a buyer must be aware of what the market can realistically offer. In the next step (i.e. step 2), the offers are received based on the tender criteria and requirements, which may be considered a mapping of the demand and supply match. The buyer then starts with the process of judging the value proposition of each bid and follows a methodical decision-making process to be followed by each member of the tender evaluation committee. In the next step, the decision made by the tender committee is then communicated to the supplier (step 3) to ensure that the bidder (supplier) is still willing and able to move forward in receiving the award of the contract based on the assessment made by the supplier as the best bid (step 4).

The right column displays the supplier's perspective. For the bidder, the process of the tender starts with the outlining of the tender documents and expectations of the buyer (step 1). This is followed by the interpretation, translation, and visualization of the proposed work, supply, or service to be rendered. The offers are then prepared by the bidders, which are meticulously prepared to match the buyer's terms and specifications stipulated in the tender documents (step 2). During the process when the tender committee is still assessing all offers, the suppliers have to wait until a judgment is made to award the contract to the best bidder. This decision is then communicated by the buyer (step 3). If none of the other bidders raise any objections, and the selected supplier accepts the offer from the buyer, then the purchase contract is awarded and formalized (step 4). The four steps show how the interactions between potential buyers and suppliers are likely to influence both the direction and the outcome of the tender process if both the legal conditions and the social dynamics of the tender are adhered to.

Figure 7.1: Decision process in tendering from perspectives of buyer and seller



Source: Author's own work

Challenges in Awarding Contracts

Public procurement decisions often give rise to discontent and complaints by bidders that did not receive the contract award. These conflicts may be triggered by emotions, perceptions of "zero sum dynamics", and interactions between officials representing the buyer and the potential seller during the tender process that may give rise to unrealistic expectations. The complexity of interactions in a competitive scenario is often driven by the variation in the composition of decision-makers involved, and the political and societal context in which they operate (Lehtonen & Virtanen, 2022). Although tendering processes ought to be transparent, non-discriminatory, and fair, the responsibility of building trust between the supplier and the buyer is a key part of the tendering process (Dotoli *et al.*, 2020).

Interactions between the potential suppliers and the buyer in a tendering process, for instance, through pre-bid meetings with suitable representatives from both sides, can enable buyers and suppliers to validate assumptions (Grandia, 2018). Such interactions between the two entities can change the interpretation of the requirements and specifications that enable bidders to prepare accurate and competitive offers. Any ambiguities in interactions between officials representing the buyer and the supplier could make bidders feel that they were not treated equally, and judgments made by the tender committee might be perceived as biased and subjective. There are also possibilities of perceptions of corruption and nepotism favouring certain suppliers. Therefore, to mitigate any perceptions of wrongdoing, involving external evaluators (independent experts) in the bid evaluation process can help to prevent misunderstandings. Judgments made with the involvement of independent experts in bid evaluation are more easily accepted by all stakeholders, including any entity that will be responsible for evaluating the assessment of the tender committee's work if any appeals are made by unsuccessful bidders. Fortunately, tendering processes also ensure that buyers and suppliers are satisfied with the outcome of the selection process because they accept the rationale of the decision (i.e. they eventually accept the reality that everyone can't win), and they may see themselves as future partners for the delivery or development of specific works, supplies, or services (Broms *et al.*, 2019).

Finally, making decisions in tendering processes is complex because a criterion or requirement in the tender documents can be interpreted differently by various people. This suggests that individuals involved in decisions may see a point differently depending upon their experiences, competencies, and responsibilities. Due to the complex nature of public procurement decisons, it is sometimes difficult to bring in the appropriate individuals at the right moment (Cheaitou *et al.*, 2019). For example, while procuring a new software system, the director or head of the IT department may not have been actively involved in preparing the actual tender documents due to other preoccupations. Hence, it is critical that key decision-makers from the section from where the requirement originated are involved in the entire procurement process. For large or complex procurements, a purchasing project can be guided by a steering committee. This steering committee usually consists of the line managers and several other main internal and external stakeholders who have insights into the need for procurement. When tenders have multiple objectives, judgments can be complicated. For instance, social responsibility and sustainability are becoming increasingly popular public values that stakeholders demand, and incorporating such into the tender makes the process more complicated, with specific experts being needed in those areas (Kundu *et al.*, 2020). These multiple perspectives need to be balanced in the tender documents to reach a final judgment about the quality of the proposed solution from one supplier to another. Therefore, a decision to award should not only be viewed as a linear assessment process but also as a holistic and multidimensional judgment

procedure to match the right supplier with the objectives of the procurement (World Bank Report, 2024).

Procedures in Tendering

Tendering is a process in which numerous potential bidders are invited to apply for a contract. Tenders may be "open" or "closed". In open tenders, anyone who feels that they meet the eligibility criteria is invited to submit their offers, whereas in closed tenders, only enlisted or pre-qualified parties are allowed to submit their bids. Public procurement systems usually contain different types of procedures regarding open versus closed tenders with a contract value above a given threshold. Each process has its own requirements that relate to the objectives and terms of the procurement. Contracts with values that are below a certain threshold may have less stringent conditions, and the buyer may have the discretion to make purchases without seeking an open tender. However, this depends on the procurement principles laid out under the national procurement laws of a country. In many cases, the government creates a special allocation for small businesses to take part in national-level tenders; hence, public organizations must ensure that they are compliant with such official policies. Such policies may be linked to ICV goals that are aimed at developing smaller local business organizations (Mandale & Kasamani, 2022).

Recommendations from the World Bank on public procurements promote open tender procedures, and as a result, the majority of tenders floated by public institutions from member countries are in the open category, with the objective of transparency and accountability to key stakeholders. In certain sensitive procurements (e.g. military hardware), closed tenders may be adopted. However, below stated threshold values, it is possible for the buyer to negotiate with established sellers through a competitive dialogue procedure, and such approaches tend to be a win-win outcome for both buyers and sellers (World Bank Report, 2024). However, such negotiated procedures should be restricted to public procurements that have sensitive official secrecy involved in them. All other public procurements above the threshold value should be subject to open tendering processes.

The preferred tendering procedure often varies from sector to sector. Moreover, consideration needs to be given to how many suppliers there are, the supplier eligibility requirements, and the type of material or service needed, etc. Furthermore, the kinds of services, supplies, projects, or works that are to be delivered warrant consideration. For instance, for a more complicated product like the development of a new software system for a ministry, procurers often prefer to have a stronger preselection and more proactive interaction with the potential suppliers than for a tender for the delivery of office supplies. Before a tender is formally started, it is advised to conduct market

research and consult with major vendors to better explain the ambitions of the planned tender and to ask tender candidates a few specific questions. In a market consultation process, the buyer can also learn more about better alternatives to their original plan and how to assess them (Yoon, 2023).

Phases of Tendering Process

To formally commence a tender, the procuring organization should advertise the tender by calling for participation, often referred to as a "call for expression of interest" through an open tendering process. Such a call for participation alerts national and international suppliers with or without a local office to take interest in the tender. Through the invitation, the buyers can indicate their objectives and non-discriminatory criteria for eligibility and specific requirements. The call for expression of interest usually gives the buyer an indication of the minimum number of candidates that are likely to participate in the bidding (Volker & Schotanus, 2023).

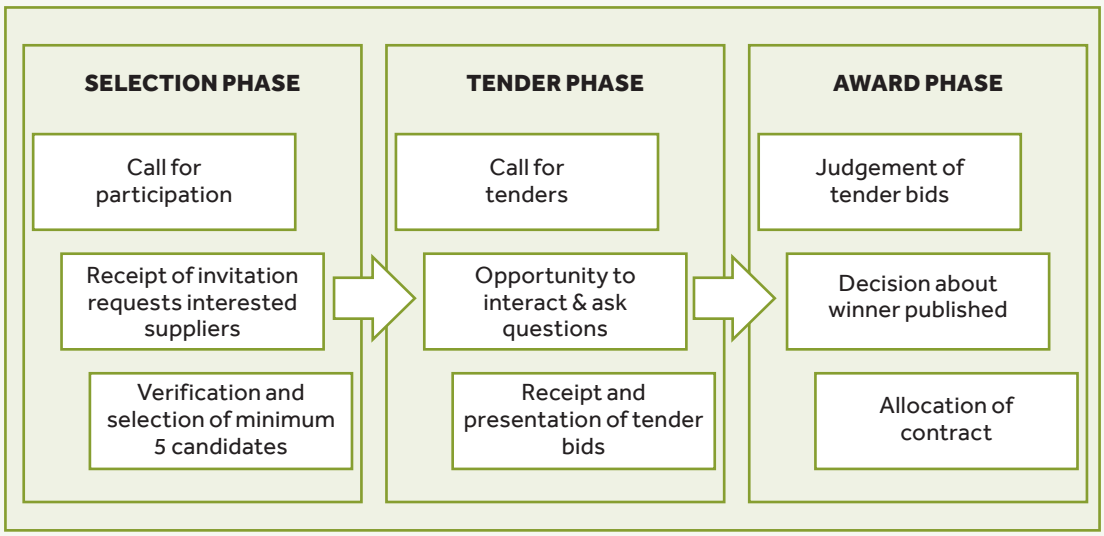
In an open tendering procedure, any supplier may submit a full bid if they desire; however, the advertisement must be clear about this matter. That is, if the call for expression of interest is not for an actual bid evaluation, then the buyer may return the sealed financial offer package back to the bidder. In the case of closed or restricted tenders, only those suppliers invited by the contracting authority may submit a tender (Milosavljevic *et al.*, 2019). Figure 7.2 presents the phases of a restricted or closed tender procedure. A restricted procedure consists of two separate phases: a pre-qualification (*selection phase*) and an award (*tender phase*).

In the *selection phase*, contracting authorities must first verify the suitability of potential suppliers (known as "pre-qualification of bidders"). Either all suppliers who meet the threshold requirement can proceed to the next phase or the evaluators can select eligible candidates by deploying multiple selection criteria comprising weights, scores, or even qualitative selection metrics. These are any general criteria not directly related to the subject matter of the public contract, such as environmental management standards, quality assurance, and references. The eligible bidders are then invited to participate in the tendering phase (Hammer & Andhov, 2021).

In the *tendering phase* (known as the "award phase"), the buyer (i.e. public contracting authority) shares the relevant procurement documents with eligible bidders only. Based on these documents, suppliers can submit their offers. Before the tender phase, the buyer often calls the eligible bidders for a pre-bid consultative meeting to gather relevant feedback from suppliers about market realities such as budget, lead time for the supplies, after-sales obligations, etc. The advantage of such a pre-bid consultation is that the participants are involved to a larger extent with the project, as they have already been preselected. Sometimes suppliers can inform the buyer about market conditions through a personal presentation (Milosavljevic *et al.*, 2019).

In a procedure that is restricted, between the selection phase and the tender phase suppliers get time to prepare the tenders according to the requirements of the buyer. In contrast, in an open tendering procedure, the selection and tender phases are integrated; that is, all offers are taken at the same time. The offer usually consists of a technical proposal and a financial offer that need to be submitted together within a predetermined deadline. Pre-bid consultations may also take place in open tenders to provide clearer guidelines to potential bidders and to ensure that all ambiguities in assumptions are removed (Yoon, 2023).

Figure 7.2: Phases in a closed or restricted tender process



Source: Author's own work

In an open tender process, the selection and tender phases are combined, which means the bidders will submit both the "technical offer" (supplier eligibility determination) and the "commercial offer" (financial offer). The commercial offer will be opened only if the bidder passes the eligibility criterion as stipulated in the tender documents. If the technical offer made by any bidder is not satisfactory, then their unopened commercial offer will be returned to them. In this way, the short-listed eligible bidders are identified for the next step where the commercial offers will be opened and given for scrutiny to a tender evaluation committee. The tender process will remain open until a contract is awarded. This is because often the suppliers that make the lowest financial offer may not be interested in signing the contract for various reasons, such as changes in costs of certain key components of the offer, or the supplier may be committed elsewhere due to the time taken by the buyer in making a decision. In such cases, the offer for a contract may have to be given to other eligible participants that were short-listed (Marcarelli & Squillante, 2020).

From the bidder's perspective, it is crucial to answer all questions placed in the tender documents by the buyer as clearly as possible. Hence, bidders ought to be allowed to ask follow-up questions to the buyer. Typically, the best forum to answer these questions is at the pre-bid meeting where all interested bidders are present. This will ensure transparency, inclusiveness, and legitimacy of the process. If the supplier does have a very specific question that they do not want to discuss in front of others, then they may be allowed to ask a confidential question provided there is no pertinent information being sought that may influence the outcome of the tender (Grandia, 2018). A distinction needs to be drawn between a dynamic dialogue in which ideas are exchanged and a static interaction to improve understanding. In practice, written questions and answers are also not uncommon in public tenders with complex requirements. Other forms of transparent communication include through a presentation by the buyer during an information meeting and visits to reference projects (Kelly *et al.*, 2021).

Once all eligible bidders have submitted their offers, the contracting authority needs to use suitable supplier selection models to identify and select the winner from among the bidders. The usual approach is to use the optimum price-quality ratio, or the lowest cost using a life cycle costing method, or in many cases buyers just award it to the lowest price offer. In the case of the optimum price-quality ratio, the buyer uses a model that is based on criteria weights and scoring methods, among other possible formulae (Lehtonen & Virtanen, 2022). Examples of criteria include technical merit, functional characteristics, quality, price, aesthetic, and even environmental and social characteristics. The buyer must declare in advance the weightage of each criterion. In this way, the award criteria are linked to the subject matter of the contract in question. All bidders should be provided with feedback from the buyer about their offers. The authority should explain the reasons for selecting the winning bid. The next section describes the process for developing a supplier selection model.

Supplier Selection Models

Numerous public sector organizations face challenges in explaining supplier selection choices to the key stakeholders, especially the bidders that did not get selected as the winners are often left dissatisfied with the decision (Kundu *et al.*, 2020). This places substantial pressure on decision-makers in tender committees. The selection process becomes more difficult when sustainability and social impact criteria are involved in the assessment, as such criteria are often quite abstract and vague, while criteria such as scores on technical specifications and prices are much easier to assess and justify. Whatever the case, it is necessary for people in decision-making positions in public procurement organizations to make the supplier selection model as objective and transparent as possible. Case study 2, along with Figure 7.3, illustrates some of the

complexities of tenders that have a sustainability impact criterion (e.g. environmental or societal impact) in the decision matrix.

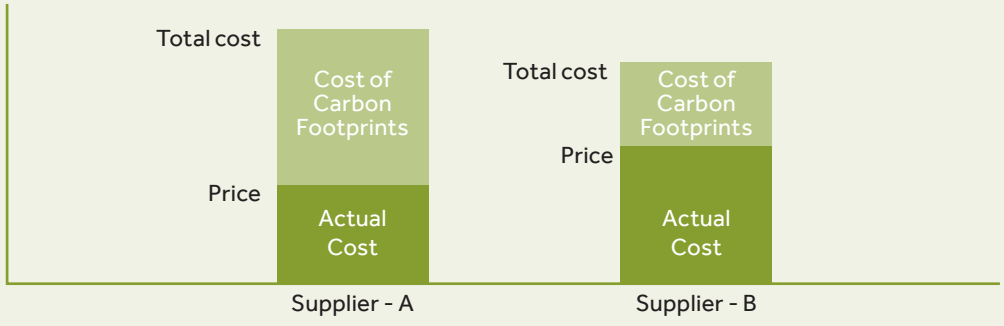
CASE STUDY 2: Complexities of Sustainability Criterion in Bid Evaluation

This tender evaluation committee faces challenges in evaluation of bids where tenders include impact assessment of environmental or social issues as criteriaalong with price and quality. This means that in addition to price, quality, and other managerial aspects of the offer, the evaluators must consider a way to optimize between the impacts of sustainability factors and the other factors. Hence, in such situations the true cost of the bid includes many external factors beyond price and quality specifications. Examples may include carbon emissions (environmental) or fair wages or safe working conditions (social) for the employees of the bidder. In such cases, there may be tendencies of the supplier to overstate their sustainability impacts if the weightage given to such criteria is substantial.

Figure 7.3 shows two suppliers, A and B. Assuming that the quality specifications of both suppliers are more or less the same, Supplier B's price is higher than A, but external costs attributed to carbon footprints are lower for B than A. In this case, the total cost of the offer for Supplier B is more competitive than that for A, although A's price is lower than B's. This means that if only price and quality were the selection criteria, then A would win the tender; however, due to the inclusion of the environmental impact of costs due to carbon emissions, the tender evaluators must incline towards B. In the long run, some organizational stakeholders and auditors may question the selection, particularly because carbon emission costs are not as accurately calculated as price.

Source: Agyekum *et al.* (2023)

Figure 7.3: Comparison between supplier bids based on total cost



Source: Author's own work

The trade-off between price, quality, and external factors is among the factor most widely used by public organizations to reach a decision. The nine steps mentioned below present a commonly used supplier selection model that was recommended by the OECD for public organizations when they decide to use the price-quality ratio as the method to select the best offer (Mandale & Kasamani, 2022):

1. Understand supply and demand possibilities.
2. Decide on an optimum selection method.
3. Construct the award selection criteria.
4. Assign weightage to each criterion.
5. Develop methods for scoring.
6. Decide on a process for selecting and awarding.
7. Robustness check of selection model.
8. Assess auxiliary components of the bid.
9. Justify tender decision.

Step 1: Understanding Supply and Demand Possibilities

Prior to developing the supplier selection model, the buyer needs to assess what is required and what the market is likely to offer. The procuring authority has several options to improve its understanding of demand and supply by exploring the market through means such as market surveys, interviews, and focus group discussions, and by employing domain experts. If such tools fail to yield sufficient insights, then conducting direct consultations with major suppliers is a suitable option before even calling for expression of interests (Mandale & Kasamani, 2022).

Step 2: Decide on Optimum Selection Method

A procuring authority needs to decide the basis on which the bidder will be awarded the contract. For making this selection, a buyer can use methods such as best price-quality ratio (BPQR), or lowest life cycle costs (LCC), or simply the lowest price (LP). With the BPQR, the procurer awards a contract based on a predetermined trade-off between price and quality or on minimum threshold quality (in this case, the price becomes the final selection criterion). The vast majority of international and local tenders in public organizations in OECD countries follow the BPQR, although some organizations also rely on the lowest price only, which differs from country to country (Harland *et al.*, 2021).

These days, social impact is often included in BPQR evaluations, resulting in a modified method known as the "best price-quality-impact ratio" (BPQIR) (Mandale & Kasamani,

2022). The external costs can be considered part of the quality criteria, but there are crucial differences between the quality of a purchase (such as the performance of the product or service) and the external impact it has on society or the environment (e.g. the carbon footprint created by its production, or societal issues such as fair pay or diversity). Therefore, impact and quality may be seen as separate topics and evaluated separately, or they could be considered together.

With the "lowest life cycle cost" (LCC) method, buyers decide on an award based on the lowest costs associated with purchasing a product or service during the entire lifetime. The lifetime cost elements include items such as purchase price and maintenance costs, and external costs such as estimated cost for environmental compliance costs, etc. The LCC method is quite complex and is not frequently applied to the procurement of products and services. It is best suited to infrastructure projects or the procurement of machinery and equipment (Marcarelli & Squillante, 2020).

In the "lowest price" (LP) approach, buyers simply decide on a contract based on price only. A major risk of the lowest price is that suppliers may be selected with higher external costs or with lower quality standards. However, it can also be a suitable method when bidders are the same as each other in terms of product quality and reputation, and the product does not have much differentiation (Grandia, 2018). For instance, for commodities where there is usually parity in quality specifications, and environmental and social impact is not a major concern, LP may be a good option. The method is simple to use and less prone to corruption and fraud than methods that include qualitative or quantitative assessments for awarding. It can also be a suitable method when the procuring organization has specific knowledge and prescribes strict specifications (Ronnback, 2012). For instance, it can be prescribed that a new bridge should be built according to a certain design and where recycled materials should be used. A predetermined design typically limits innovation, but it also reduces transaction costs and makes it easier for many more bidders to participate in public tenders. If a buyer uses LCC or LP only to award a contract, step 3 (next) is not required.

Step 3: Developing Selection and Award Criteria

If buyers understand what they require and what is available in the market, then they may begin to think about choosing the appropriate selection and award criteria that they will apply in the tender evaluation process. Selection criteria and award criteria are quite distinct and are not to be confused. During the selection phase, the aim is to select those bidders who are *eligible* based on eligibility requirements predetermined and declared by the buyer in the tender documents. It is likely to be relatively easy for tenderers to submit a request for participation in the selection phase where price submission is not required. In the tender (award evaluation) phase, the buyer then assesses the best offer received from the short-listed

tenderers based on price and other specific features that must be related to the subject matter of the public contract in question (Cheaitou *et al.*, 2019).

In practice, selection criteria, once established by organizations, are just copied from the previous tenders and any modifications needed are the result of brainstorming sessions among those responsible for managing the procurement. This may lead to a broad set of subcriteria that may not always be distinct from previous tenders. It is important to ensure that there are no overlaps while copying criteria or subcriteria from prior tenders. To ensure this, several methods are available, such as using decision-tree structures or the goal-setting technique. The goal-setting technique means that the original goals related to a tender are translated to requirements and criteria specific to the new tender.

Step 4: Assigning Weightage to Each Criteria

The next step is to specify the relative weightage given to the criteria chosen to determine the tender with the best ratio between each criterion. The weightages can be expressed by providing a percentage or a range with an appropriate maximum spread. In many cases it is not possible to justify assigning weightage as the importance of all the criteria is more or less the same. In such cases the buyer may place the criteria in descending order to indicate importance.

Usually, not all criteria carry the same weightage. The weights of the different criteria (e.g. price, maintenance costs, quality, societal impact, environmental impact, etc.) are decided based on the specific context of the work, supply, service being procured, or project contract being awarded. For example, in certain situations, quality is more important than price or costs, and the criteria for quality will automatically outweigh the cost criteria. Organizations deploy various methods to assign weightage. For instance, they can use the panel of domain experts who will be asked to assign weights to each criterion by using decision-making methods such as card sorting or the Delphi technique, etc. These domain experts are expected to be aware of the needs of the buyer and the nature and characteristics of the procurement (Ronnback, 2012).

Another popular method for assigning weights is the analytic hierarchy process (AHP). This method acknowledges that the human mind has difficulties with comparing the importance of several criteria simultaneously. Hence, to make a more reliable decision, the AHP compares each criterion pairwise to each of the other criteria (Marcarelli & Squillante, 2020). This can be done by using different Likert-type scales (e.g. a five-point or a seven-point scale) where the procurement team indicates for each pair of criteria whether they are equally important or whether one criterion is slightly more important than the other. AHP tools are widely available for free on the Internet.

For the bid evaluation process, the weight of each criterion is the most critical indicator that will ultimately influence the decision regarding the best offer made in a tender. As an example, when a buyer uses a threshold for a criterion or when a certain selection method is used, this can influence considerably the supplier choice.

Step 5: Developing Scoring Methods

Once the criterion weights are determined, the next step is to decide on a scoring method. Scores are meant to be allocated to each supplier for each criterion. The scores are tied to different components under each criterion of the offer submitted by each bidder. The scoring methods may be either qualitative or quantitative in nature. Moreover, they may be either absolute or relative. The techniques are explained next.

Qualitative scoring methods are used for evaluating different elements of each criterion in the tender bid through a qualitative assessment. To assign a score, typically the tendering organization uses a rubric to make a qualitative assessment of each element under each criterion. Scores assigned to designs, plans, and other steps can be determined relatively or absolutely. An example of a relative approach would be to state that Supplier X scored higher on criterion 1 than Supplier Y. On the other hand, absolute techniques of scoring may use the weighted sum model (WSM). A template for absolute scoring for assessing the quality component of an offer is illustrated in Table 7.2. The scoring levels used in the table are in line with previous research that suggests that organizations typically use five basic levels of quality assessment: unsatisfactory (underperformance), satisfactory (basic performance), good (added value), very good (added substantial value), and excellent (much better than expected).

The scores in Table 7.2 range from unsatisfactory (0) to excellent (1.0). For example, when the buyer indicates "good", it means that the quality offered adds value, whereas bids of very good quality or excellent quality are rewarded with higher scores relatively as the difference between good and very good is only 20%, while the difference between satisfactory and good is 40%. This means the scores are not linear. Applying such a technique to scoring in a tender can be simple and easy to use.

Table 7.2: Sample scores for quality

Qualitative Assessment per Criterion	Score to be Assigned
Contributes to a great extent to realizing the quality specifications (excellent)	1.0
Contributes substantially to quality specifications (Very Good)	0.8
Adds value to the quality specifications (Good)	0.6
Contributes satisfactorily to the quality specifications (basic performance)	0.2
Does not meet quality specifications (unsatisfactory)	0

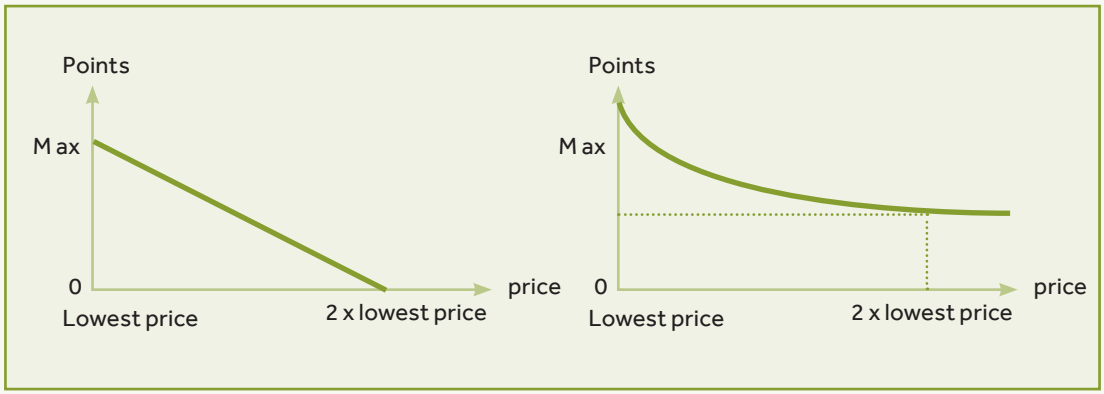
Source: Author's own work

In addition to the above technique, numerous types of scoring tables are available. Although there is no empirical evidence suggesting which scoring method leads to better decisions, it is important to note that the scoring ranges for different types of criteria should be rational and pragmatic. For example, if the scoring range for "quality" suggested in Table 7.2 were to be based on more than five basic standards (i.e. unsatisfactory to excellent) to say ten levels, then it would be more difficult to assign scores, and the variation of scoring between each committee member would vary greatly due to the subjectivity of the finer-grained scores. This means that the scoring range makes it difficult for buyers to justify their selection.

Quantitative scoring methods are used for assessing tangible qualities such as prices, delivery times, and greenhouse gas emissions, etc. Like qualitative criteria, quantitative criteria may also be evaluated either relatively or absolutely. Suitable formulae for both linear and curved relative scoring based on price are shown below:

As can be seen from Figure 7.4, the "curved relative scoring method" has a strong incentive for suppliers to offer as cheaply or as expensively as possible, by offering quality that is greater than the specifications mentioned in the tender.

Figure 7.4: Relative scoring with linear and curved methods on number of points to be assigned to bidders based on their price offer



Source: Author's own work

In comparison to relative scoring methods, absolute scoring methods are independent of how other suppliers bid. The effect of the curved methods is that bidders are incentivized to offer a lower price, but such incentives decline eventually, which in turn encourages suppliers to invest more in factors such as quality and sustainability impacts, compared to focusing on lower prices. Furthermore, absolute scoring techniques provide more information to suppliers than relative techniques, as maximum and minimum prices are indicated. Developing such graphs during the preparation phase of every best price-quality ratio (BPQR) type tender is a helpful step, because it increases insights into the actual behaviour of a mathematical model.

The literature on scoring methods suggests that there is substantial debate among scholars about the application and benefits of relative versus absolute methods. Relative methods tend to be easier to deploy as no advanced market knowledge is necessary for setting a suitable minimum and maximum price range. Nevertheless, relative scoring methods have some shortcomings, as they don't provide suppliers with insights regarding an acceptable price range, and as a result, bidders are incentivized to offer the lowest possible prices. With relative scoring methods, it is always better for a bidder to target lower prices, as it will increase their score and possibly lower the scores of other competitors. This primary focus on price reduces the quality of the offer and the importance of environmental or social impact. Mathematical modelling and empirical data also show that relative scoring methods could lead to lower price-quality ratios than absolute methods (Dotoli *et al.*, 2020).

Step 6: Decide on a Bidder Selection and Awarding Procedure

Designing a suitable bid tender award method paves the path for the buyer to arrive at a decision to award the tender. A widely used method in public procurement is the weighted sum model (WSM). In the WSM, all bidders are given scores on each of the

criteria. These scores are then multiplied by the respective weights of each criterion decided in step 4. The supplier with the highest total score is selected as the winner. There are numerous variants of the WSM, which are in practice selected based on the preference of the organization. An example of such a modified weighted sum model for the tender phase is illustrated below in Case C, based on Tables 7.3 and 7.4).

CASE STUDY 3: Illustration of Modified Weighted Sum Method with Social Impact

A popular WSM variant uses the "highest impact technique" for supplier selection. The method involves two rounds of selection. In the first round, the buyer assesses their predetermined preference between price and quality. In the three offers between Suppliers X, Y, and Z (Table 7.2), the buyer has set threshold requirements for quality in the prequalification stage, leaving little room for quality to be evaluated in round 1. Therefore, the highest weight is now shifted to price (in this case, 30 points maximum for price, and only 5 points maximum for quality beyond threshold requirements). Price scores are then calculated using an absolute scoring method. The buyer has already indicated in their tender documents that all bids with scores of 25 points or more may proceed to the next round (i.e. round 2). In this case, Supplier Z is rejected because it does not meet the threshold for sufficient price-quality ratio with a score of 24. In round 2, only impact is evaluated (in this case social impact). As there is only one criterion, no weights are required. The bid with the highest impact in round 2 will win the tender; in this case it is Supplier Y. Note that alternative methods may also be possible that will likely lead to similar results. For instance, a buyer could use WSM based on three award criteria, in a single assessment round. The buyer could attach a very high weightage in this case to social impact (e.g. 80%), and set a minimum threshold for the price-quality combination.

Source: Author's own work

Table 7.3: WSM – highest impact technique: round 1

Criteria	Price (OMR)	Weighted Score for Price	Weighted Score for Quality	Subtotal
Supplier X	1.8 million	30	3.6	33.6
Supplier Y	2.5 million	21.6	3.4	25.0
Supplier Z	2.6 million	21	3.0	24.0

Source: Author's own work

Table 7.4: WSM – highest impact technique: round 2

Criteria	Social Impact (score)	Rank (outcome)
Supplier X	3.0	2
Supplier Y	7.0	1

The winner is Supplier Y. Source: Author's own work

In addition to the WSM technique described above, there are other modified versions of the WSM in use. The following are two common additions:

Compensatory and Non-compensatory Methods:

Compensatory methods enable suppliers that have a low score in one criterion to compensate for this with a good score in another criterion. On the other hand, non-compensatory methods are strict and do not allow any low scores to be compensated.

Monetary and Point Methods:

Another useful approach is to convert quality and impact assessments into monetary values, meaning that better evaluation results in higher monetary values. With a monetary method, quality and impact (social or environmental) values may be deducted from the price of a bid. The supplier with the lowest total cost wins the tender.

Methods of awarding can influence which supplier wins, but it is also important to realize that the offers themselves can differ if a different method is used. If the evaluators use the highest impact method, rational suppliers are likely to offer a decent price-quality ratio that aims to maximize positive impact such as social impact or minimize negative impact such as carbon footprints.

Step 7: Robustness Check of Selection Model

Before disclosing the winning score, all components of the supplier selection analysis need to be re-evaluated to ensure that selection fits in with the organizational objectives of the procurement. Hence, a final check is needed to ensure that the selected offer is the optimum choice. This is done by conducting a robustness check by including hypothetical offers. This means that the buyer checks whether the model functions as intended. To achieve this, the evaluators can create several hypothetical bids and calculate whether the bid that was considered by the procurement team to lead to the best score is the proper winner of the tender. The hypothetical bids cover a cheap price offer along with low quality and low impact (social/environmental) scores, and a high price offer with high quality and high impact (social/environmental) scores, and at least two more intermediate bids. This exercise ensures robustness of the model in selecting the best offer.

Step 8: Assess Auxiliary Components of the Bid

After assessing the parts of the offer that deal with price, quality, objectives, specifications, impact, etc., through scoring methods, it is time to assess the auxiliary elements of the offer made by the winning bidder. These elements may include a plan of approach, timeline, conceptual design, and possibly other criteria such as skills and qualifications of the employees of the supplier that will be involved in providing the goods or services or managing the contract. Assessing such non-numerical components could be challenging for several reasons. It can be difficult to put into words why a certain bid is better than another, without disclosing confidential information about the bid of a winning supplier.

In addition, evaluators may not be sufficiently experienced with the new procurement, especially when it is of a technical nature and is a complex new project, thus making the assessment difficult for them. In such situations, the procurement team may have to bring in subject matter experts to provide a suitable assessment of such factors.

Step 9: Justifying the Tender Decision

For the tender evaluation team, the last stage is the obligation to document the process of selection and provide the name of the awardee to the tendering authority along with suitable justifications for making the selection of the winning bidder. For each tender, the procurement team needs to explain in writing how they went through multiple iterative and incremental stages of decision-making. This is essential to ensure transparency and accountability in the actual decision processes. Information should also include who was involved, when, what kind of assumptions were in place, and how the final decision was arrived at. This transparency is not just to comply with policies or legal requirements, but to ensure the legitimacy of the process in case unsuccessful bidders challenge the final decision.

Once a decision is made, the procuring organization ought to justify it to their own organization, to the public, to society, and to the suppliers that participated in the tender. These multiple responsibilities are often described as "the many hands that make it difficult to identify one single person responsible for a decision". In justifying a decision, a decision-maker is simultaneously confronted with the legal structure of the decision procedure and the crucial issue of keeping the tendering process ethical and fair. Justifying a decision requires expertise, and in many cases the tender and award committees (i.e. procurement evaluation committee) may not consist of domain-specific experts. Therefore, the committee may accept help from experienced external professionals that can present well-written documentation of the decision-making process followed by the committee.

Acceptability of the Procurement Process

Two critical aspects of the tendering process need to be ensured in maintaining the fairness of the process. First, how the bids will be evaluated should be explained clearly in the tender documents. Any new assessment criteria or elements must not be added after the bids have been submitted and while the assessment process is in progress. At times, the procurement committee may feel the urge to do so as and when they realize that some points have been left out by them in the tender specifications and terms. However, any changes after the offers have been submitted by the bidders can be viewed as malfeasance and will open the doors to questions on the ethics of the process followed (World Bank, 2024). As a public organization, it is suggested that an independent person should be appointed (e.g. not an active member of the procurement committee) who will supervise the assessment process, check that no new elements have been added to the evaluation and ensure that all aspects mentioned in the tender documents are properly accessed and communicated in the feedback to the bidders (Broms *et al.*, 2019).

Second, several members of the evaluation committee (at least three people from the committee) should evaluate all the bids individually. When assessments are made in a group, such assessments are often subject to social desirability bias, where some member with greater authority in the organization tends to influence the outcome. Therefore, in the initial stage, it is recommended to have independent assessments made, which can be tallied later during the committee meetings. Moreover, the individuals who conduct the independent assessments should include at least one domain expert who is familiar with the intricacies of the item being procured. The involvement of experts (with no conflict of interest) can ensure the quality of decisions and the decision-making process, especially when dealing with purchases that are new to the organization. The deployment of an outside expert in tender evaluation may be perceived as a weakness of the procurement team, but it is an effective way to shut out social influences. It can therefore be perceived by the outside world as fairer and more accurate. The demerits of this method are that insights of other decision-makers are not shared, and decisions are not as easily accepted.

Public Procurement Rules in Oman

Public tendering policies and regulations in the Sultanate of Oman are under the umbrella of the Oman Tender Procurement Board (OTPB). Most projects and acquisitions made by the government are routed through OTPB, which is an independent "tender Board" that comprises senior-level government officials that are supported by staff who are technocrats and professionals. The board relies on recommendations made by the concerned ministry that is making the procurement and consultants. Some of the public

organizations have their own tender boards, such as PDO (Petroleum Development Oman), The Diwan of the Royal Court, Royal Oman Police, Ministry of Defence, etc.

The laws governing public procurement in the Sultanate have been updated under His Majesty Haitham bin Tarek through a new royal decree (32/2022). This new decree delves into restructuring of the secretariat-general of the tender board by introducing new administrative divisions with the aim of upgrading the efficiency of government projects and purchases, and enhancing local content to foster greater ICV.

The overall guidelines for public procurements in Oman are based on a previous royal decree (36/2008) issued in October 2008, under the leadership of His Majesty Late Sultan Qaboos, that sets rules and regulations pertaining to public procurements in the Sultanate of Oman. The law covered all administrative apparatus of the state, including those that have autonomous (independent) legal structures and all wholly owned government companies. The law addresses a greater spectrum of works and procurements of goods and services that are subject to tendering processes. This also includes the purchase of real estate.

Five different methods of procurement are described by all government-owned entities: (1) through open public tender; (2) by restricted tender; (3) through direct award; (4) by Mumarasa; and (5) through Musabakah. Most entities are expected to use the public tendering process to procure works and services. However, in certain situations, the public entities may choose to take advantage of an alternative method to procure where applicable.

Public (Open) Tender

The public tendering process is the primary way in which projects, works, and services are procured. Although the principles under the new law are still like those under the old, there are some amendments in the new law. First, under the old law, if a bidder was in a dispute with the government over an existing contract, the tender board had the power to disregard their bid. The new law has now removed this discretionary power. Second, entities subject to the new law are now permitted to make a change in cases where the order is greater than RO100,000 or 10% of the value of a contract without having to retender. This is conditional upon certain provisions being satisfied; however, it should allow greater flexibility in the tendering process.

Restricted Tenders

In certain circumstances and contexts, the public organization may not pursue open public tendering and instead opt for a tender process that is restricted to pre-qualified bidders. The new law has retained these principles from the previous law and, in addition, has outlined the basic pre-qualification procedures.

Direct Award

The promulgation of the new law has increased the variety of circumstances in which a contract can be awarded directly. Previously, only contracts worth less than RO10,000 were eligible, and only then if it was shown that a direct award was necessary. The new law allows a contract to be awarded directly in four different situations:

a. in special cases (not specified);

b. when a contract is awarded to a government unit, organization, or company;

c. if the value of the contract does not exceed RO10,000; or

d. in the case of necessity, if the value of the contract does not exceed RO25,000.

Mumarasa

The idea behind Mumarasa is that of a negotiated contract. The new law has confirmed that procurement by Mumarasa is allowed in "special circumstances" and in certain "specific circumstances", in each case where this will lead to contracts on the best commercial terms available. The new law has expanded the list of specific circumstances and includes work conducted abroad for the government and the purchase and lease of real estate.

Musabakah

While there were no specific provisions in the old law for Musabakah, the concept has in practice been used before. The principle of Musabakah is competition and is neither a pure tendering process nor a direct award. However, it can only be used in respect of work relating to the carrying out of studies, drawings, designs, models, or other technical work. The basic idea is that the concerned entity will ask bidders, through a public announcement or a direct invitation, to submit their studies/designs, etc. and, from the pool of entries, a winner will be chosen. Unlike the direct award, contracts of any value can be procured through a Musabakah if the other conditions are satisfied. In addition, bidders are not required to provide bid bonds, performance bonds, or professional indemnity insurance.

Chapter Summary

A thorough discussion on public tendering procedures and best practices requires an entire volume with multiple chapters to cover the subject in sufficient detail. Therefore, this chapter, being a part of the entire syllabus on ICV attempts to cover some of the salient aspects of public procurements through the tendering processes. The aim of this chapter is to provide readers with sufficient insights into the rationale and processes involved in deploying tenders as an approach to ensuring transparency and fairness in public procurements. Many of the concepts discussed are drawn from recommendations and guidelines presented by the OECD and the World Bank, and scholarly publications in academic literature.

The discourse presented tried to explain how decision-makers in a tendering process endeavour to rationalize the match between supply (market realities) and demand (requirements of the buyer) enabling the procurement of a project work and supply of goods or service. Therefore, supplier selection may be viewed as a sensemaking process that tries to match different stakeholders' interests keeping in mind cultural and political dynamics of the organization. However, a pertinent challenge in supplier selection in tenders for public organizations is that the supplier selection procedures need to be published and clarified before the bids are received. Hence, any new insights developed after opening the bids cannot be used to change the supplier selection criteria or model.

The nine-step supplier selection model presented in this chapter is widely adopted among public organizations in the European Union and North America. These sequential steps have been found to positively influence the quality and value of the bids, and at the same time ensure that ethical guidelines are followed and the legitimacy of the process is ensured. The suggested process can translate the aspirations and views of the buying organization into the tender, making it as transparent and structured as possible. The evaluation process may be augmented by the inclusion of external experts and by ensuring that the tender and award committee judges the bids individually and then triangulates the decision through group consensus. This enables the buyer to select the supplier that matches their requirements at all levels of the organization and increases both the external and the internal support for the final tender award decision.

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Keywords Index:

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Accountability
Analytic Hierarchy Process (AHP)
Award criteria
Award decision
Award methods

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Best price-quality-impact ratio (BPQIR)
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Musabakah
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Organizational dynamics
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Tender documents
Tender evaluation
Tender phases
Tender process
Transparency

V
Vendor Development Programs (VDPs)

W
Weighted Sum Model (WSM)

Y



Questions from Chapter 7:

Managing Tenders for Public Procurement

1. What organization has played a significant role in creating internationally acceptable benchmarks for public procurements?

A. UNICEF

B. WTO

C. OECD

D. WHO

2. Which foundational principles are emphasized by the OECD in its public procurement recommendations?

A. Efficiency, Secrecy, Homogeneity

B. Equality, Transparency, Diversity

C. Exclusivity, Opacity, Conformity

D. Expediency, Ambiguity, Uniformity

3. According to the text, what is the underlying rationale for achieving a globally accepted standard for public procurements through tendering?

A. Maximizing profits for suppliers

B. Ensuring free movement of supplies and services

C. Limiting competition among suppliers

D. Reducing diversity in procurement processes

5. In the context of decision-making in procurement through tenders, what complicates the identification of decision criteria?

A. Lack of transparency

B. Obsolete information

C. Rigidity in tender processes

D. Excessive competition

6. What challenges might arise due to rigidities in tendering processes, as mentioned in the text?

A. Increased buyer influence

B. Limited competition

C. Reduced transaction costs

D. Faster decision-making

8. What essential differences must tender evaluation committees consider when assessing potential suppliers from foreign countries?

A. Cultural diversity

B. Currency exchange rates

C. Laws under which the supplier will be bound

D. Language barriers

10. Why is it often more advantageous for organizations to execute award contracts with local suppliers or local agents of international suppliers?

A. To avoid international competition

B. To simplify procurement procedures

C. To ensure enforceability of contractual obligations

D. To reduce the risk of disputes

11. What is the key focus during the alignment process in the tendering process, as mentioned in the text?

A. Market competition

B. Supplier expertise

C. Matching buyer's needs with supplier's offer

D. Legal obligations of the supplier

12. What may trigger conflicts and complaints by bidders in public procurement decisions, according to the text?

A. Market competition

B. Unrealistic expectations

C. Enforceability of contracts

D. Buyer-supplier pre-bid meetings

13. To mitigate perceptions of wrongdoing in tender processes, what recommendation does the text provide?

A. Enforcing stricter laws

B. Involving independent experts in bid evaluation

C. Conducting more pre-bid meetings

D. Implementing arbitration clauses

14. What makes decision-making in tendering processes complicated, according to the text?

A. Clear and standardized criteria

B. Uniform interpretations

C. Consistency in perspectives

D. Different interpretations based on competencies and experiences

15. What is the primary goal of Step 6 in the supplier selection model, which involves deciding on a bidder selection and awarding procedure?

A. Conducting a market survey

B. Developing scoring methods

C. Designing a suitable method to decide the tender award

D. Assessing auxiliary components of the bid

16. In the context of public procurement in Oman, what is the role of the Oman Tender Procurement Board (OTPB)?

A. Implementing infrastructure projects

B. Managing internal government affairs

C. Overseeing public tendering policies and regulations

D. Regulating financial institutions

17. Which scoring method involves comparing each criterion pairwise to each other criterion and is known for its application in supplier selection?

A. Weighted Sum Model (WSM)

B. Analytic Hierarchy Process (AHP)

C. Absolute scoring

D. Relative scoring

18. What does the "Compensatory" method in supplier selection allow?

A. Strict evaluation without compensation

B. Adjusting low scores with high scores in another criterion

C. Considering external costs

D. Using absolute scoring

19. Under what circumstances can a contract be awarded directly according to the new Royal Decree (32/2022) in Oman?

A. Only for contracts worth less than RO 10,000

B. In special cases and work conducted abroad

C. If a dispute with the government exists

D. Only for contracts exceeding RO 25,000

B. Short Essay Questions:

1. Discuss a situation where a high benchmark for sustainability compliance might impact the eligibility of suppliers in a tender process.

2. Explain the potential consequences and considerations for a procuring organization when they realize that proposed solutions by tenders are more expensive than estimated in the budget.

3. Describe how changes in the organizational context may affect the assumptions made in the call for proposals during a tender process.

4. Discuss the importance of arbitration clauses in tender contracts and how they contribute to dispute resolution.

5. Explain the advantages presented for purchasing locally or through local agents of international organizations instead of direct contracts with international suppliers.

6. Describe the interaction between the demand side and the supply side during the tendering process.

7. Explain the role of pre-bid meetings in the interaction between buyers and potential suppliers during a tendering process.

8. 8. Discuss the importance of involving independent experts in bid evaluation to prevent misunderstandings in the procurement process.

9. Explore the challenges and considerations in balancing multiple perspectives in tender documents, especially in the context of social responsibility and sustainability.

10. Explain the significance of conducting a robustness check in the supplier selection model. Provide examples of hypothetical bids that may be included in this check and their purpose.

11. 11. Discuss the considerations and challenges involved in integrating social impact into the Best Price-Quality-Impact Ratio (BPQIR) method for supplier selection. How can organizations effectively balance quality, price, and societal impact in this approach?

12. Compare and contrast the three primary supplier selection methods: Best Price-Quality Ratio (BPQR), Lowest Life Cycle Costs (LCC), and Lowest Price (LP). Provide insights into when each method is most suitable, considering factors such as product differentiation, external costs, and societal impact.

13. In the earlier sections of this chapter, there is a discussion on the need to adhere to strict standards of tendering processes and the possibility that such strict compliance may prevent the buyer from getting the most suitable supplier or vendor for their procurement. Explain this dichotomy by providing suitable examples.

14. In complex procurements, it is suggested to arrange pre-bid meetings with potential vendors. What are the benefits and risks of holding such meetings? Use hypothetical or real examples to explain this matter.

15. In the 9-step model for supplier selection, the no. 7 suggests a robustness check. Explain the purpose of this step? And how can the tender evaluation committee conduct such a step?

C. Long Essay Questions:

1. Explore and analyze the complexities of decision-making in procurement through tenders, considering the influence of situational characteristics, competitive environments, and the interaction between decision-makers and suppliers. Provide relevant examples to support your discussion.

2. Examine the role of public procurement rules in enhancing transparency, accountability, and efficiency in government spending, with a specific focus on the case of Oman. Discuss the key provisions and changes introduced by the Royal Decree (32/2022) in restructuring the Secretariat-General of the Tender Board. How do these legal frameworks contribute to fostering in-country value (ICV) and ensuring fair competition in public procurements?

D. Case Studies

Case Study 1: HVAC (Heating Ventilation Airconditioning) for New Convention Center

The municipal authority in the state of Texas, USA is in the process of completing the first phase of the construction of their new convention center. The new building will have to soon select a vendor for the HVAC component. All specifications and drawings have been developed by the project consultant in accordance with the architectural and engineering design of the facility. The tender documents related to an "enabling works" project are valued at $6.5 million. The project was to be awarded as a "Maximum Fixed Price Contract", which is a way to put a cap on the total amount available in the budget for this component of the works.

The tender documents received comprised of instructions to tenderers in 535 pages, tender form, agreement template, template for the bid-bond and performance bond (bank guarantees), terms of contract, additional special requirements of the buyer, information sought from the bidders to be eligible, information provided by the buyer to the bidders, warranty requirements by the contractors, warranty for any alternate design proposals by the seller, parent company guarantee (if applicable), technical work specifications, drawings of the layout prepared by consultant, and bill of quantities with 913 items. In the first stage, some problems were encountered with the bid documents that were identified by some of the potential bidders. The three major contactors of HVAC in the area, identified shortcomings in the technical specifications where there were missing information, incomplete drawings, conflicting information, inadequate specifications. Moreover, general areas requiring further clarification of information were needed. In relation to these problems, the engineers from three potential bidders raised 15 tender queries (TQs) that were submitted to the authority's tender manager and to the consultant requiring additional information. Table A-1 shows the analysis of the 15 TQs raised by the bidders.

Table A-1: Queries Raised by the Bidders Prior to Submission of Tender Bids

Query no.	Description	Type of Feedback Needed
TQ1	The drawing for electrical wirings is missing	Request missing drawing
TQ2	Existing support structures for HVAC ducting on the site need to be taken out and removed. The contractor is expected to design and reconstruct it. However, no information is provided about details of the existing structures.	Need further information
TQ3	The construction of exhaust is described. However, the notes are vague.	Need clarification
TQ4	Tender documents indicated that Volume 2 of the documents will follow later. No date was given. This will affect the pricing.	Need information
TQ5	Request for construction environmental management plan. Contractor needs to know specifics about this matter to prepare cost estimate of plan.	Need clarification
TQ6	There are discrepancies between specifications and what is stated in drawings.	Need clarification
TQ7	Thickness of ducting material is not specified.	Need information
TQ9	Payment schedule in relation to deliverables not clear in the tender documents.	Need clarification
TQ10	Contractor wants to know the significance of the sectional completion date, why it is set; and whether it has a bearing on other factors apart from an existing access.	Need information
TQ11	Contractor requires further clarification regarding the extent and scope of utilities work.	Need clarification
TQ12	Bill of quantities not provided in sufficient details	Need information
TQ13	Procedures for quality inspections not clear.	Need clarification
TQ14	Under which state laws will conflicts be resolved?	Need clarification
TQ15	Preference for chillers is limited to three brands. Can this be expanded.	Need information

Source: Author's own work

The number of questions raised (Table A-1) could have been more than 15 but the tender manager from the authority was strategically hesitant in allowing the bidders to raise too many queries. Firstly, the manager of the tender committee for the Houston City Authority expressed concerns that too many questions may be misinterpreted by the consulting firm to mean that they did not understand the job. Secondly, the tender manager thought that by allowing suppliers to raise too many questions the committee may end up divulging commercially advantageous information to the bidders. The authority perceived the questions as a ploy by bidders to corner the tender committee to reveal more information that would reduce the competitiveness of the bids. On the other hand, if a section of the drawings or specifications was not properly presented before the bids are submitted, then there may be possibilities of claims by contractors during the project execution phase. Thus, the tender committee was in a dilemma.

Subsequently, the tender committee decided to call all the bidders for a pre-bid meeting instead of answering the questions in writing. The meeting was also attended by the HVAC design consultant for the Authority. During the meeting, additional questions including the 15 TQs were raised by the bidders that were answered verbally by the committee. As a result of the meeting, some changes were made to the original tender documents, and the bidders were informed about the changes.

Finally, the tender date was closed, and nine (9) bidders took part in the tender. In the first stage, the eligibility criterion of each bidder was checked by verifying if all required documents were submitted. The next step was to evaluate the technical bid without opening the financial bid. The consultant was involved in the technical evaluation process. Out of nine, 5 bidders were found to be eligible to proceed to the next stage (financial evaluation). At his stage, only tender committee members along with an external independent expert assessed the financial offers. After much deliberations, it was decided to award the contract to a bidder that had recently completed another project of the same nature in the City of Dallas in the same state of Texas.

After the tender winner was announced, some of the other bidders complained that their specific queries were not properly clarified, as a result, they could not customize their offers to be more competitive. The tender committee ignored these pleas from the other bidders and went ahead and signed the contract with the winner of the tender. This made some of the other bidders very angry, and one of them decided to seek a stay order from the court on the execution of the tender. This meant that the project is likely to be delayed if the court stayed the tender proceedings.

Questions related to case 1:

1. What mistakes were made by the tender committee before advertising the tender? How could they have prevented them?

2. What mistakes did the tender committee make when queries were sent by the bidders? How could the tender manager have dealt with it differently?

3. Now that one of the disgruntled bidders has approached the court for a stay order, what steps do you suggest to the tender authority to urgently tackle the situation before the court orders a stay on the execution of the tender proceedings?

Case Study 2: Challenges in Creating ICV in Procurement of Advanced Technology

The Civil Service Pension Fund (CSPF) in an emerging economy in the ASEAN region has been operating its massive database and processes for a long time using an ERM (enterprise resource management) software developed by a local company based on open-source platform. The ERM system has been working well for a long time and the CSPF has sufficient in-house IT staff that manage and maintain the system. However, with the new big data analytics capabilities that are offered by international technology companies that use Generative Artificial Intelligence (GenAI), the new systems have very powerful and robust predictive capabilities in terms of data analytics and forecasting of trends along with capacity for preventive foresight. With this background in mind, the Ministry of Finance ordered the CSPF to announce a tender for procurement of a new ERM system from vendors (both local and international) that have the latest capabilities that GenAI offers. By using such a system, the Ministry of Finance can easily predict the cashflow needs of the Pension Fund over the next 5 to 10 years.

The Chairman of the Pension Fund immediately convened a meeting of the board and directed the President of CSPF to constitute a tender committee to develop the tender documents and appoint a tender management team. The senior management appointed one of the Big Four international consulting firms to prepare the tender documents for them as this required expertise beyond the capacity of the existing IT team currently working under CSPF. In a matter of two (2) months after frequent meetings with the tender project management team of CSPF, the tender terms, specifications, and procedures were agreed. The tender team understood that once tender was advertised as it is, it will reduce the possibility for local companies to qualify (as part of the goals of in-country value guidelines of the government), and mostly international companies will become eligible bidders. Hence, the tender committee added a "social impact" criterion to the tender that had some elements of ICV. After much debate, the tender was advertised where participants were to submit a "technical offer" and "commercial

offer" separately. In stage 1, the technical offer will be scrutinized, and the eligible bidders will be notified. In the next stage, the commercial offers will be opened, and the tender evaluation team will examine the prices of the contracts (development, installation, smooth transfer of existing data and merging with new data, testing, and commissioning, etc.), and the training and maintenance costs for the system over the next 5 years.

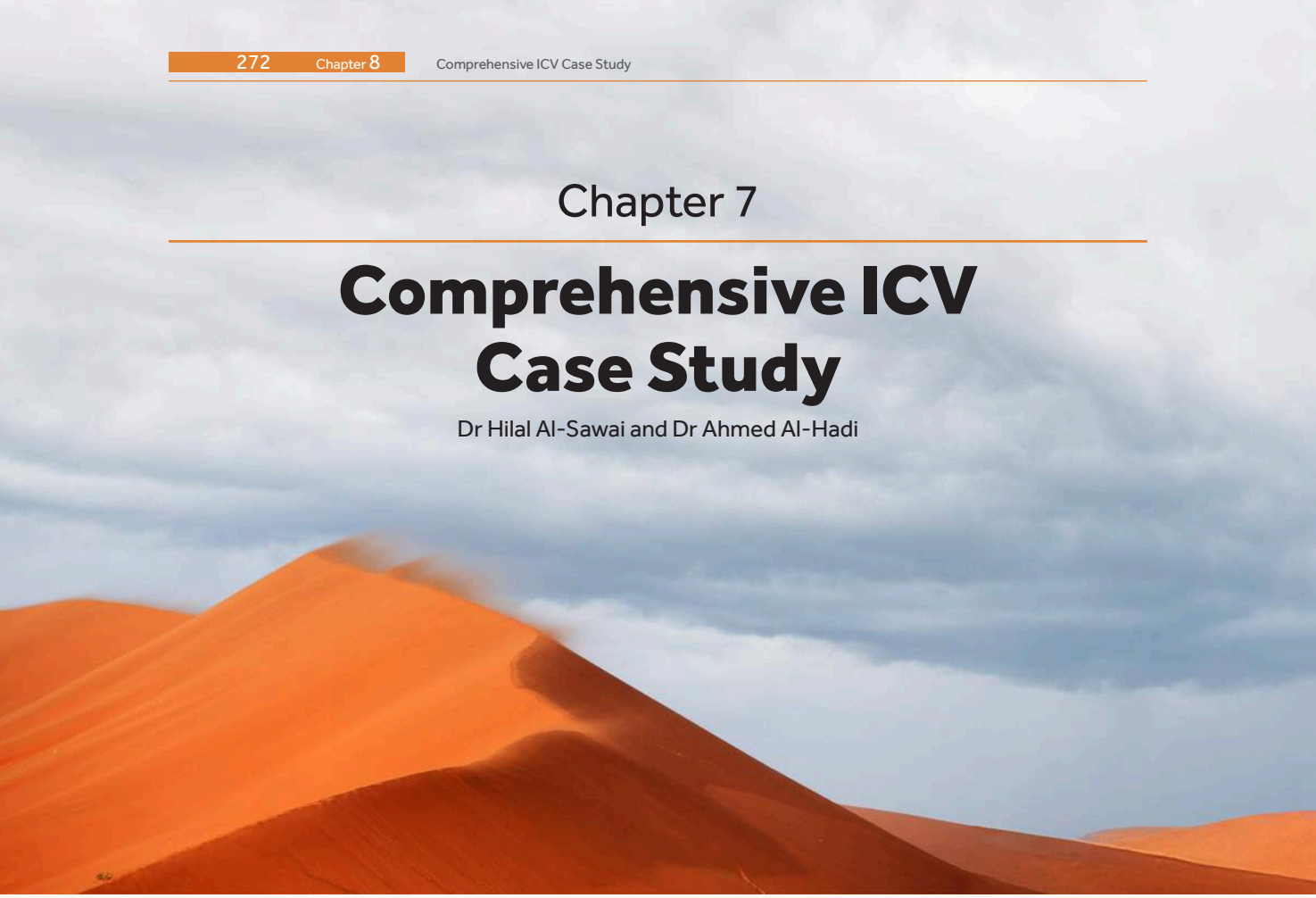
The question raised by committee members was whether they should keep the international consultant involved in tender evaluation processes or not. The concern was about conflict of interest and confidentiality of the information. Some of the technical members of the committee felt that it was helpful to have the consultant involved. However, the head of the tender committee was apprehensive, because the Big Four consultants have ongoing relationships with potential bidders such as Microsoft, SAP, Oracle, Epicore, Accenture, and others. Therefore, he took the matter to the CEO of the organization and the CEO agreed that at the evaluation stages, it was better to keep out the consultant, and instead involve a local expert (e.g., university professor or retired professional with ICT background). Also, another concern raised by the CEO was how to convince the Ministry of Finance, that we are complying with government's ICV policies?

After 120 days of advertisement of the tender, 27 bids were submitted. The stage 1 assessment of all bidders revealed that only 6 international companies qualified to Stage 2, and not a single local company. At this stage, changing any criterion to accommodate some local companies was not possible. The matter was sent to the CEO for his feedback. The CEO discussed the matter with the Chairman of CSPF and they both met the Minister of Finance to discuss the issue. It was apparent from the meeting that lack of inclusion of local bidders may become a problem later, however, the tender regulations in the country prohibit changing tender terms once the tender has been advertised in an open tender system. Moreover, if the tender committee can write a proper justification, then the problem can be overcome.

After one more month, the eligible 6 international companies were notified. They were invited to the session of opening of the commercial offers in from of them. The original contract price was announced, but other aspects such as maintenance and training costs were not revealed. The bidders were informed that they would be notified in 15 days. Using a modified weighted sum method that included social impact criterion (such as more jobs for locals, payment of taxes to host country, etc.), the value of each offer over the life cycle of the offer was calculated. The results were sent to the Board of the organization for their consent, as the lowest value was around USD $ 4.31 million. Some board members raised the issue of ICV. The CEO pointed out that the social impact criterion had sufficient ICV components in it. The board then approved the decision of the tender committee. Thereafter, the bidders were informed of the final decision and the name of the winner of the tender.

Questions related to case 2:

1. The tender procedures were prepared by an international consulting firm that was appointed directly without competitive bidding. If the procuring organization had issued a tender for selecting the consultant, it may have created opportunities for local consulting companies to offer consulting services. Do you think that the decision to only appoint a Big Four global firms for consulting was a good step by the organization? Or would it have been better if local companies got a chance to provide consulting services for preparing tender documents? Justify your answer.
2. Do you think that the social impact criteria in the commercial offer is sufficient to justify ICV inclusion in the tender?
3. If you were the head of the tender committee, how would you design the tender to ensure greater ICV contribution in the tender?



Chapter 7

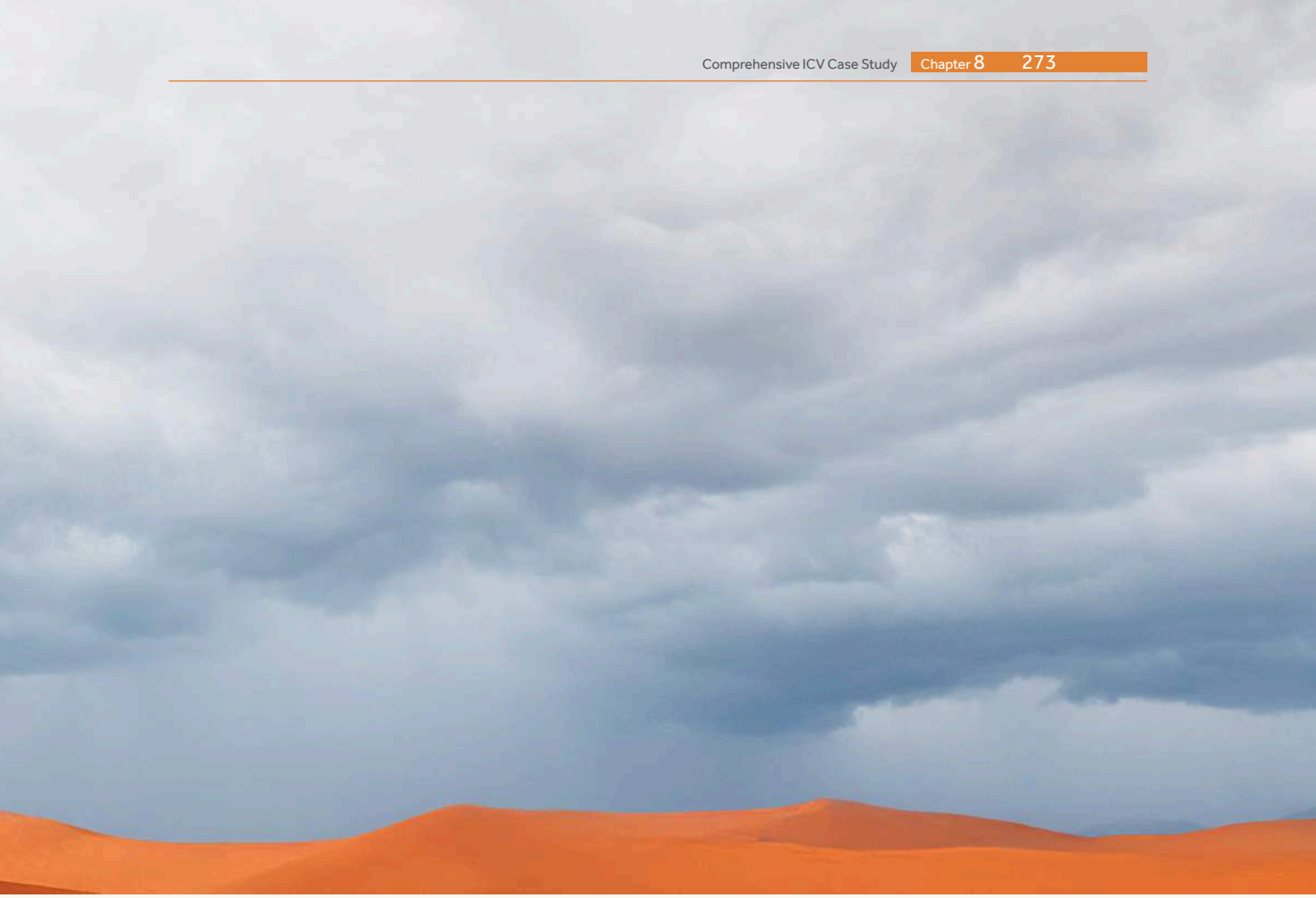
Comprehensive ICV Case Study

Dr Hilal Al-Sawai and Dr Ahmed Al-Hadi

Abstract

This chapter explores the tender process and the application of In-Country Value (ICV) in the oil and gas sector, focusing on Petroleum Development Oman (PDO) during the tender process. It aims to provide a comprehensive understanding of PDO's ICV framework, strategy, and its integration into procurement and contracting practices from the tender call to the final award. Through a detailed case study, the chapter examines PDO's initiatives to enhance local content, support small and medium-sized enterprises (SMEs), and foster workforce development. The practical examples and detailed tender evaluation processes are provided to illustrate how PDO maximizes socio-economic benefits for Oman through its ICV initiatives.

Keywords: *ICV framework, PDO, C7, T3, SME, LCC, training levy*



Learning Objectives:

- To understand the ICV framework and strategy.
- To analyse the tender process and its role in ICV: detailed analysis of C7 and T3 initiatives.
- To evaluate the development and implementation of an ICV plan.
- To analyse small and medium enterprise (SME)/local community company (LCC) contributions to ICV.
- To evaluate the role of the training levy in ICV tenders.

Introduction

In this chapter, we try to mimic the tender and application of ICV scores in oil and gas sector. Given that most processes and ICV calculations are seen as internal report processes and procedures, this chapter will explore more about ICV in the Omani oil and gas industry, and particularly in PDO (Petroleum Development Oman). We try to understand the tender process and ICV application from the tender process and how ICV applies in each process. This chapter delves more into the comprehensive case study of ICV implementation by PDO, focusing on its integration within the tendering process in the oil and gas industry. Given the critical role of local content in driving economic growth and diversification, this study examines PDO's strategic framework, initiatives, and methodologies to foster local business development, enhance workforce capabilities, and promote sustainable socio-economic benefits. By exploring the tender process and ICV application, particularly through detailed case examples, this chapter aims to provide a thorough understanding of how PDO aligns its operations with national priorities to maximize the ICV and support the Sultanate's broader economic objectives.

Understanding PDO's ICV Framework and Strategy

The concept of In-Country Value (ICV) has emerged as a strategic imperative within the oil and gas industry, particularly in regions where the sector forms the backbone of the economy of the Sultanate of Oman. In-Country Value (ICV) represents the total spending retained domestically that supports business growth, enhances human skill development, and boosts productivity within the Omani economy, as highlighted by Petroleum Development Oman (PDO), the leading exploration and production company in Oman, which has been at the forefront of implementing ICV initiatives to maximize the socio-economic benefits derived from its operations.

This case study investigates the strategic frameworks and operational mechanisms PDO employs to drive ICV. It explores how PDO aligns its procurement, contracting, and corporate social responsibility (CSR) activities with national priorities to foster local content and capacity building. By examining PDO's approach to ICV, this chapter provides insights into the challenges and successes encountered in enhancing local economic contributions, developing local talent, and supporting local businesses. PDO has pioneered ICV standards and requirements by maximizing the employment of Omanis and introducing a vocational professional training scheme, maximizing expenditure on goods and services by Omanis in Oman. And for maximizing and developing locally produced materials and products and equipment through increasing the added value in Oman, introducing new technologies and growing Oman's exports, all within tender evaluations, PDO rewards contractors for their commitment to Oman.

For instance, PDO has successfully managed to create and sustain more local jobs in oil and gas by developing a national objective programme called "EMDAD".[1]

Furthermore, PDO's ICV mission related to local business development is to improve the capacity and capability of domestic companies, leading to more economic growth and job creation for Omanis. For instance, as a social investment strategy, PDO's strategy related to SMEs in terms of ICV is to provide support for local companies, enhance the creation of SMEs and spin-offs, attract international suppliers, establish long-term relationships with the SMEs, and ringfence work scopes that can be executed only by SMEs and local community companies (LCCs). PDO established its ICV tender rules based on four pillars: goods, services, people, and investment.

In December 2013, a comprehensive strategy for the Omani oil and gas sector was launched, targeting the release of $64 billion in economic benefits for the Sultanate, boosting Omani supply chains, and creating more than 50,000 jobs by 2020, including business opportunities for local entrepreneurs. Through the ICV strategy, PDO managed to lead in ICV not only in Oman but regionally. PDO's strategy in ICV is to inspire and highlight the very best of PDO as a partner in serving the nation and maximizing the retention of economic benefits within the country.

The significance of ICV in PDO's strategy is underscored by the company's commitment to sustainable development and its alignment with Oman's Vision 2040. The initiatives undertaken by PDO not only aim to enhance the value generated within the country but also ensure that the local workforce and businesses are integrated into the supply chain, thereby promoting long-term economic diversification and resilience.

The Tender Process and Its Role in ICV

The tender board process in the oil and gas industry is a structured procedure used by companies to procure goods and services. This process ensures transparency, competitiveness, and fairness in awarding contracts (for more detail see Chapter 7, which explores the topic in greater depth).

1. EMDAD has been known as a PDO arm for capability building since 2011. The initiative has created more than 30,000 jobs in the oil and gas sector. The purpose of the programme was to deliver value to the nation by maximizing the employment of skilled Omanis with PDO contractors across the wider oil and gas sector to achieve sustainable job creation. Petroleum Development Oman (pdo.co.om)

PDO's tendering process typically involves several key steps:

i. **Preparation and Approval of Tender Documents:** The company prepares detailed tender documents outlining the scope of work, specifications, terms and conditions, and evaluation criteria.

ii. **Invitation to Submit Bids:** Invitations are sent to potential suppliers or contractors, often through public announcements or direct invitations to pre-qualified vendors.

iii. **Bid Submission:** Interested parties submit their bids within a specified deadline.

iv. **Evaluation of Bids:** A tender board or committee evaluates the bids based on predetermined criteria, which may include price, technical capability, experience, and compliance with local content requirements.

v. **Awarding of Contract:** The contract is awarded to the bidder that best meets the evaluation criteria, often balancing cost-effectiveness with quality and compliance requirements.

vi. **Contract Management:** The winning bidder enters into a contract with the company and the performance of the contract is monitored and managed.

The tender board process at PDO integrates ICV considerations into the bid evaluation criteria. Bidders are required to submit detailed ICV plans outlining how they intend to maximize local content in their projects. These plans are assessed alongside technical and financial criteria to determine the overall value of the bid. In the ICV plan, all bidders are required to include their technical and commercial reports involving the ICV spending. The technical report is known as T3, and the commercial report as C7.

The purpose of the technical (T3) and commercial (C7) parts of the tender:

Technical Tender (T3)

The tenderer must submit one original unpriced technical tender electronically via the RABiTAH SRM system. Additionally, the tenderer is required to provide one original technical tender in hard copy to the Contracts Engineer at Petroleum Development Oman, specifying the name, reference index, and office location. All sections of the tender, whether submitted in hard copy or electronically, must be signed by an authorized representative who can legally bind the tenderer and must include the tenderer's name and stamp. The technical tender should not include any pricing information. See Table 8.1 for a description of items within T3.

Table 8.1: The following items shall constitute the technical tender (T3)If the tenderer

T3 Article Ref.	Description
2.1	Form of Tender – Technical
2.2	Parent Company Guarantee or Performance Guarantee
2.3	Ownership and Registration
2.4	Financial Status
2.5	HSE Capability Assessment Questionnaire & Hazards & Effects Management Assessment
2.6	Staffing of Contract, Head Office Support
2.7	Tenderer Key Personnel CVs
2.8	In-Country Value (ICV)
2.9	Small and Medium Enterprises (SMEs) and Local Community Contractors (LCCs)
2.10	Method Statement/Scope Understanding
2.11	Tenderer's Experience & Performance
2.12	Site Establishment
2.13	Quality Documentation
2.14	Subcontracting
2.15	Withholding Tax
2.16	Company Lead Logistics Provider (LPP)
2.17	Tender Bond
2.18	Substantiation of PPT screening questions
2.19	Other technical information
2.20	Alternative Technical Tender
2.21	Transfer of Omani Staff
2.22	Mobilization Plan
2.23	Identical Unpriced Copy of the Commercial Tender

intends to submit an alternative technical tender, it must be provided with the same number of hard and electronic copies as the base tender and submitted simultaneously. The alternative technical tender should be clearly marked as such.

Commercial Tender (C7)

The tenderer must submit one priced electronic copy of the commercial tender via the RABiTAH SRM system. Additionally, the tenderer must provide one original priced commercial tender in hard copy, which should be bound and clearly marked as such. This hard copy must be securely wrapped in plain, opaque paper and marked with the tender number and title. It should be delivered to Petroleum Development Oman, addressed to the Secretary of the Tender Board, on or before the commercial tender closing date specified. The packaging should not display any other references, trademarks, or identifying marks. Table 8.2 presents items from C7.

Table 8.2: The following items shall constitute the commercial tender (C7)

C7 Article Ref.	Description
3.1	Form of Tender – Commercial
3.2	Completed Schedule of Rates (C5)
3.3	Alternative Schedule of Rates, if any (C5)
3.4	In-Country Value (ICV)
3.5	Cost of Performance

Developing and Implementing an ICV Plan

Below (refer to Tables 8.3 and 8.4) is an exercise for one of the PDO tenders called "*Integrated Field Catering & Facilities Management Services*". By the end of this case study, participants will have a detailed understanding of PDO's ICV initiatives and the various mechanisms employed to enhance local content and socio-economic development. They will also be able to critically evaluate the effectiveness of these initiatives and consider how similar strategies can be applied in other contexts to maximize the ICV. PDO (hereinafter referred to as "PDO" or "Company") invites bidders to submit their proposal for Tender No.: PDO-22-318 (hereinafter referred to as "Services" or "Work") as detailed in this bid document (C7). The bidders will be provided with an instruction summary for their tender.

Table 8.3: Summary tenderThus, we will apply the ICV plan for each pillar, starting from:

TENDER SUMMARY		
A	Tender No.	PDO-22-318
B	Tender Title	INTEGRATED FIELD CATERING & FACILITIES MANAGEMENT SERVICES
C	Date of Letter of Invitation to Bid	The date of ITBD issuance in the Online Tendering portal
D	Bid Closing Date and Time	The date specified in the Online Tendering portal as amended if any
E	Bid Validity (Duration)	(180) days from (latest fixed) Bid Closing Date
F	Tender Analyst and Main Communication Focal Point	Initial communication upon receipt of ITBD: PDO@, Subsequent communication to be sent to the name specified in the respective tender in the Online Tendering portal
G	Value of Tender Bond	OMR3,000
H	Value of Bank Guarantee (to be furnished in case of contract award)	Not less than 5% of the estimated total contract value. Actual value will be mentioned in the award to the successful bidder
I	Performance Guarantee Letter	Not Applicable
J	Closing date for consolidated tender query submission	Seven days prior to the closing date will not be entertained
K	Date for Site Visit or Tender Briefing	PDO to issue notification if site visit or tender briefing is required
L	Tender Tentative Award Date	April 2023
M	Contract Duration	Four years basic period + one year extension option

Table 8.4: ICV plan as per ICV pillars

Pillar	Subcomponents	Contributions within the scope of the tender contract (USD)
A: Investment	A.1: Future investment	Future investments into the Omani oil and gas sector
	A.2: Existing investment	Investments in place supporting the Omani economy
B: Omanisation of the workforce	B.1: Omanis	Compensation awarded to Omanis
	B.2: Expats	Compensations awarded to Expats
C: Local sourcing of goods	C.1: Made in Oman	Products, equipment, and materials made in Oman
	C.2: NR suppliers	Goods supplied by a nationally registered supplier
	C.3: FR suppliers (FR	Goods supplied by a supplier registered abroad
D: Local sourcing of sub-contracted services	D.1 NR subcontractors	Services provided by nationally registered contractors
	D.2: FR subcontractor	Services provided by internationally registered contractors

Source: Wealth Financial Consultant, Unpublished work and C7

A. Investment Pillar:

1. Investments made towards ICV goals through fixed assets. This consists of two components:

i. Future investment considers any new or future planned investments that will be made within the scope of the bidding project in Oman, related to the oil and gas sector.

ii. Existing investment considers any existing investments already in place towards the Omani economy that supports the execution of the contract scope of the bidding project. It should be noted that a 0% weight is assigned here as a placeholder in the formula. Currently, existing investments are not considered in tender evaluations. However, it is still maintained as a factor in the score calculation because the ICV framework is dynamic,

and a percentage might be assigned in the future. Below is an example of investment (see Table 8.5):

Table 8.5: Investment summary calculation

	Future Investment (A1)	Existing Investment (A2)
Total investment	$5,000,000	$10,000,000
Expected usage	5%	5%
Direct ICV	$250,000 = 5%* $5,000,000	$500,000 = 5% * $10,000,000
Standard Investment Multiplier	2	2
Induced Retained Investment	$250,000 = (2-1)* $250,000	$500,000 = (2-1) * $500,000
Element Weightage	20%	0%
Investment ICV Score	= 20%*($250,000+ $250,000) $100,000	$0 = 0%*($500,000+ $500,000)
Total Pillar A score	$100,000 = $0+ $100,000	

Source: Wealth Financial Consultant, Unpublished work and C7

Above is a sample calculation for the contribution of a proposal that included expenditures of 5 million USD and 10 million USD, for subcomponents A1 and A2, respectively. Remember the utilization of net assets in considered the final capital investment calculation. Net asset calculation is provided below as per the guideline (PWC, 2023).[2] Please refer to Table 8.6 regarding depreciation percentage.

2. https://taxsummaries.pwc.com/oman/corporate/deductions

Table 8.6: Depreciation percentage from PWC

Asset	Rate (%) per year	Depreciation (year)
Permanent buildings	4	25
Semi-permanent buildings	15	7
Docks, quays, jetties, sea barriers in ports, pipelines, roads, and railway lines	10	10
Aircraft and ships	15	7
Hospital buildings, educational establishments, and equipment for scientific research	100	1
Total		
*The depreciation rate allowed is doubled if buildings are used for industrial purposes.		

Pool	Rate (%) per year	Depreciation (year)
First pool is comprised of tractors, cranes, and other heavy machinery and equipment, including computer software installations, furniture and fixtures, vehicles, computer software, and intellectual property (IP) rights t	33.33	3
Second pool is comprised of drilling equipmen	10	10
Third pool is comprised of 'other machinery and equipment' not included above	15	7

Source: https://taxsummaries.pwc.com/oman/corporate/deductions

However, in this tender, "Integrated Field Catering & Facilities Management Services", the bidder did not fill in this form (sheet shown in Figure 8.1) as it is not applicable in this case.

Figure 8.1 (Table A): Capital investment in fixed assets in Oman (when applicable)

To be completed by Contractor					
NOT to be completed by Contractor - auto/formula completion					
To Add new rows to the table, Select the entire last row of the table and drag it to create the number of new rows required.please DON'T insert a new row in the middle of the table.					
				Total Future investment	0.00
				Total Existing investment	0.00
Investment Type	Year of Investment	Investment Category	Summary Description of the investment (incl. location)		Value (USD)

B. Workforce Pillar:

In line with the ICV objectives of enhancing the Omanization level in the employment of personnel and the utilization of local resources, bidders shall submit an Omanization programme/plan of their organization in general and the workforce that would be employed and the local manufactured products to be outsourced.

The Omanization of the workforce considers the compensations of both Omanis and expats.

1. Compensation paid to Omanis as part of the contract execution in US dollars.
2. Compensation paid to expats as part of the contract execution in US dollars.

The workforce pillar is made up of two categories (contractors and subcontractors); and for each category, the existing PDO model counts for Omani and expatriate ICV contribution. As part of the model input, contractors are required to provide all workers related to the execution of the contract with details of the main company, lead contractor, or subcontractor as part of the tender, as shown in Table 8.7 below: Thus,

Table 8.7: Example of workforce sheet

Workforce Category	Senior Management			Professional			Supervisory			Skilled / Semi Skilled		
	HD	MH	CP	HD	MH	CP	HD	MH	CP	HD	MH	CP
Contractor												
Omanis	10	7500	$45.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
Expatriate	5	4000	$36.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
Sub-contractor												
Omanis	20	5600	$20.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
Expatriate	23	7800	$15.00	0	0	$0.00	0	0	$0.00	0	0	$0.00
Total												
Omanis	30	13100	$449,000	0	0	$0	0	0	$0	0	0	$0
Expatriate	28	11800	$261,000	0	0	$0	0	0	$0	0	0	$0
%	52%	53%	63%	0	0	0	0	0	0	0	0	0

Source: Wealth Financial Consultant, Unpublished work and C7

the contractors shall enter HD, which stands for "headcount": "headcount" number of full-time equivalent employees or in-house contractors/agency staff within the contractor or third-party subcontractor who will be involved in the execution of the contract. Then, MH stands for "man-hours": "man-hours" means the number of hours of work undertaken in the execution of the contract (only the actual hours written, or to be written, in the contract execution are included), for different types of labour categories, including senior management, professional, supervisory, skilled/semi-skilled, and unskilled labour. However, the contractors shall update all workforce related to the main contractor only listed under the Ministry of Labour at the time of bidding. The number reflected should meet the total quantity and Omanization percentage of the workforce required; contractor can update.

In this tender (Integrated Field Catering & Facilities Management Services) the bidder shall submit relevant documents and specific documents as requested in C7. Note that the subcontractor is not applicable in this tender (see Table 8.8).

Table 8.8 (Table B1): Workforce- in this part bidder must fill out format below

Professional						Supervisory					
EXP			OM			EXP			OM		
Compensation per Hour	Headcount	Man-Hours	Compensation per Hour	Headcount	Man-Hours	Compensation per Hour	Headcount	Man-Hours	Compensation per Hour	Headcount	Man-Hours
0.000	0	0.00	0.000	0	0.00	0.000	0	0.00	0.000	0	0.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00
0.000	1	810.00	8.177	22	17820.00	0.000	7	5670.00	1.429	4	3240.00

Source: Author's compilation

Table 8.9: Disaggregation of workforce

Skilled/Semi						Total Quarterly	Omani Percentages %	Total Yearly					
EXP			OM			EXP							
Compensation per Hour	Headcount	Man-Hours	Compensation per Hour	Headcount	Man-Hours	Compensation per Hour	Headcount	Man-Hours	Compensation per Hour	OM	EXP		OM
0.000	0	0.00	0.000	0	0.00	0.000	0	0.00	0.000	0	0	0.00%	0
8.544	0	0.00	0.000	64	51840.00	0.000	86	69660.00	0.000	90	94	48.91%	90
8.544	0	0.00	0.000	64	51840.00	0.000	86	69660.00	0.000	90	94	48.91%	90
8.544	0	0.00	0.000	64	51840.00	0.000	86	69660.00	0.000	90	94	48.91%	90
8.544	0	0.00	0.000	64	51840.00	0.000	86	69660.00	0.000	90	94	48.91%	90
8.544	0	0.00	0.000	78	63180.00	0.000	79	63990.00	0.000	104	87	54.45%	104
8.544	0	0.00	0.000	78	63180.00	0.000	79	63990.00	0.000	104	87	54.45%	104
8.544	0	0.00	0.000	78	63180.00	0.000	79	63990.00	0.000	104	87	54.45%	104
8.544	0	0.00	0.000	78	63180.00	0.000	79	63990.00	0.000	104	87	54.45%	104
8.544	0	0.00	0.000	104	84240.00	0.000	66	53460.00	0.000	130	74	63.73%	130
8.544	0	0.00	0.000	104	84240.00	0.000	66	53460.00	0.000	130	74	63.73%	130
8.544	0	0.00	0.000	104	84240.00	0.000	66	53460.00	0.000	130	74	63.73%	130
8.544	0	0.00	0.000	104	84240.00	0.000	66	53460.00	0.000	130	74	63.73%	130
8.544	0	0.00	0.000	158	127980.00	0.000	39	31590.00	0.000	184	47	79.65%	184
8.544	0	0.00	0.000	158	127980.00	0.000	39	31590.00	0.000	184	47	79.65%	184
8.544	0	0.00	0.000	158	127980.00	0.000	39	31590.00	0.000	184	47	79.65%	184
8.544	0	0.00	0.000	158	127980.00	0.000	39	31590.00	0.000	184	47	79.65%	184

Source: Compiled by the author

C. Goods Pillar:

Local sourcing of goods determines the expenditure to be made towards all goods (i.e. materials, equipment, products, and commodities) within the scope of the contract execution. The expenditure is categorized into three subcomponents (refer to Table 8.10):

1. "Made in Oman" goods, defined within the ICV matrix as "product, material or equipment that is included in the list of goods of Omani origin issued by the Ministry of Commerce, measured as total $ to be paid for MIO goods and % of $ to be paid for all goods".
2. Goods supplied from nationally registered (NR) suppliers.
3. Goods supplied from foreign registered (FR) suppliers.

Table 8.10: Goods pillar calculation

Made in Oman (Pillar C1)	Nationally registered supplier (Pillar C2)	Foreign registered supplier (Pillar C3)
$ 344,440	$ 3,500,000	$ 2,639,000
70%	18%	6%
$241,108	$630,000	$158,340

Source: Wealth Financial Consultant, Unpublished work and C7

In this tender, "Integrated Field Catering & Facilities Management Services", the bidder shall submit relevant documents and specific documents as requested in C7 ICV regarding the goods. Below (Figure 8.2) is an example of what bidders shall file in goods sheets.

Figure 8.2 (Table C): Sample example of goods in this part bidder must fill out below format

Table C - Goods/Material/Products to be utilized in the execution of the contract scope										
Key:										
To be completed by Contractor - Updates shall be based on contract duration period. For example the contract duartion for 2 years then bidders to update the table below for 2 years only.										
NOT to be completed by Contractor - auto/formula completion										
To Add new rows to the table, Select the entire last row of the table and drag it to create the number of new rows required.please DON'T insert a new row in the middle of the table.										
C1 - Made-in-Oman Goods Utilised in Contract Execution from Nationally Registered Suppliers										0.00
C2 - Made-in-Oman Goods Utilised in Contract Execution from SMEs										753,457.14
Made-in-Oman Goods Utilised in Contract Execution procured from LCCs										727,483.12
C3 - NOT Made-in-Oman Goods Utilised in Contract Execution procured from National Registered Companies										0.00
C4 - NOT Made-in-Oman Goods Utilised in Contract Execution procured from Foreign Companies										2,210,785.00
C5 - NOT Made-in-Oman Goods Utilised in Contract Execution procured from SMEs										0.00
NOT Made-in-Oman Goods Utilised in Contract Execution procured from LCCs										0.00
Procurement Type	Year	Period	Goods Category	Goods Sub Category	Company Name/ JSRS/CR	JSRS Category	Vendory Category (Read Only)	LCC (Y/N)	Summary Description	Value (USD)
Made_In_ Oman	2023	Q3								
Made_In_ Oman	2023	Q4	Other and Equipments	Food and Products	Omani Company	Medium	SME	Yes	Food Items, Coffees, Teas etc.	98,340.00

Source: Compiled by the author

Services Pillar:

Local sourcing of subcontracted services covers expenditure with the contract scope towards the hiring of third parties, and it consists of two subcomponents.

1. Services provided by nationally registered (NR) subcontractors.
2. Services provided by foreign registered (FR) subcontractors.

The service considers the retained value of utilizing Omani services within the project to achieve ICV objectives. The service pillar is calculated as below (Table 8.11):

Table 8.11: Services pillar calculation

Nationality Registered (NR) supllliers (Pillar D1)	Foreign registered supplier (Pillar D2)
$ 4,000,000	$ 20,000,000
70%	10%
$2,800,000	$2,000,000

Source: Wealth Financial Consultant, Unpublished work and C7

The services providers are classified as follows (Table 8.12)"

Table 8.12: Types of registered suppliers

Nationality Registered (NR) supllliers (Pillar D1)	Foreign registered supplier (Pillar D2)
Large	Not applicable
SLCC	
SME	
LCC	

Source: Wealth Financial Consultant, Unpublished work and C7

In this tender, "Integrated Field Catering & Facilities Management Services", the bidder shall submit relevant documents and specific documents as requested in C7 ICV regarding the services. Below is an example of what bidders shall file in goods sheets (Figure 8.3).

Figure 8.3 (Table D): Services sample example in this part bidder must fill out format below

Table D - Services									
Key:									
To be completed by Contractor - Updates shall be based on contract duration period. For example the contract duartion for 2 years then bidders to update the table below for 2 years only.									
NOT to be completed by Contractor - auto/formula completion									
To Add new rows to the table, Select the entire last row of the table and drag it to create the number of new rows required.please DON'T insert a new row in the middle of the table.									
D1 - Local Sourcing of Services from Nationally-Registered Supplier Utilized in Contract Execution									8,147,373.98
D2 - Sourcing of Services from Foreign Companies Utilized in Contract Execution by Foreign Companies									0.00
D3 - Sourcing of Services from SMEs									621,017.42
Year	Period	Service Category	Service Subcategory	Service Provider	JSRS Category	Vendory Category	LCC (Y/N)	Summary Description	Value (USD)
2023	Q4	Other and Services	Catering and Services	Sakan	Large	LCC	Yes	Catering Services Provider	954,470.53
2024	Q1	Other and Services	Catering and Services	Sakan	Large	LCC	Yes	Catering Services Provider	954,470.53
2024	Q2	Other and Services	Catering and Services	Sakan	Large	LCC	Yes	Catering Services Provider	954,470.53
2024	Q3	Other and Services	Catering and Services	Sakan	Large	LCC	Yes	Catering Services Provider	954,470.53
2024	Q4	Other and Services	Catering and Services	Sakan	Large	LCC	Yes	Catering Services Provider	954,470.53

Source: Compiled by the author

Tender ICV Dashboard:

The tender ICV dashboard will summarize all bidders' prices; the ICV plan will then accordingly calculate the retained ICV. Mainly, as discussed above, the ICV calculation model for tenders, emphasizes its four main pillars: investment, workforce, goods, and services. Petroleum Development Oman (PDO) integrates these pillars into its tender evaluation process to generate the ICV retain value, and then rank it accordingly. PDO calculates the In-Country Value (ICV) retained from the ICV plans submitted with each tender. This dual ranking process involves initially evaluating the tenders based on price and then reranking them based on the ICV retained percentage; thus, the dashboard will relatively consider both rankings under a formula that may prefer a contractor with a better ICV retain value, but not compromising the advantage of the lower price tender strategy. The dashboard provides below a detailed view of the evaluation process for all bidders. The initial ranking is based on the bid value alone, while the ICV evaluation based is given a 10% preference.[3]

For instance, CONTRACTOR E had the lowest bid value at $25,551,091 and was ranked first, whereas CONTRACTOR D, with the highest bid value of $135,932,527, was ranked fifth. Each contractor submitted an ICV plan detailing the local content value retained. The ICV value retained percentage varies significantly among the bidders, with CONTRACTOR C retaining the highest percentage at 57.7% from Investment, Workforce, Goods, and Services pillars, while CONTRACTOR D had the lowest at 13.3%. However, CONTRACTOR E is still ranked 1, because the price difference between CONTRACTOR E (lowest price) and CONTRACTOR C's highest ICV retained is huge. Thus, the contract will be award to CONTRACTOR E because 37.2% from the contract value will be retained in the country. CONTRACTOR E after the award of the tender shall submit a quarterly report to control the compliance with the ICV plan (Table 8.13).

3. The preference is provided by PDO to give more evaluation flexibility during the tender process. Article 36, Royal Decree 36/2008.

Table 8.13: Sample dashboard of tenders format below

Bidder	Bid Value	Ranking Before ICV	Plan Submission Value	ICV Value Retained	ICV Value % Retained	ICV Preference	ICV Preference Value	Normalized Bid Price after ICV	Ranking After ICV
CONTRACTOR A	$41,128,995	2	$14,590,393	$9,035,782	22.0%	10%	$903,578	$40,225,417	2
CONTRACTOR B	$58,779,590	3	$13,474,750	$8,218,844	14.0%	10%	$821,884	$57,957,705	3
CONTRACTOR C	$74,849,340	4	$71,823,040	$43,188,160	57.7%	10%	$4,318,816	$70,530,524	4
CONTRACTOR D	$135,932,527	5	$38,433,960	$18,082,448	13.3%	10%	$1,808,245	$134,124,282	5
CONTRACTOR E	$25,551,091	1	$15,368,735	$9,516,457	37.2%	10%	$951,646	$24,599,445	1

Source: Compiled by the author

In this tender, "Integrated Field Catering & Facilities Management Services", CONTRACTOR E shall submit to Company the actual ICV performance through Company's ICV M&R System. The contractor shall report the actual ICV performance achieved from the effective date of the contract in the reporting frequency as tabulated below (Table 8.14):

Table 8.14: Winning contractor's performance report

Reporting Period	Reporting Due Date
1st Quarter of the year	21st April
2nd Quarter of the year	21st July
3rd Quarter of the year	21st October
4th Quarter of the year	21st January
Business Performance Reviews	As required

Source: Compiled by the author

1. The contractor shall ensure that all ICV data reported to Company are true and accurate. Company reserves the right to audit any information regarding ICV provided by the contractor and/or request supporting additional information or to appoint a third party to do so on its behalf.
2. The contractor shall report the actual performance against commitments of the approved ICV plan throughout the operational period.
3. At any time during the contract period, the company reserves the right to request the contractor to provide an overall contractor ICV performance report for review.
4. The contractor is responsible for collecting, processing, and storing information related to ICV received from subcontractors and manufacturers. The contractor shall keep all backup copies of the information and shall provide such backup to the company upon the company's request.

F. F: Small and Medium Enterprises (SMEs) and Local Community Contractors (LCCs)

PDO is committed to fostering SME growth and supporting local entrepreneurs, leveraging its strategic position as the leading oil and gas producer in Oman. Abla Al Riyami, PDO's ICV Director, highlights PDO's initiatives aimed at diversifying the economy and creating job and training opportunities for Omanis. Since the late 1990s, PDO has been developing SMEs, initially called "local community contractors" (LCCs), to extend commercial opportunities within its concession areas. This support has led to the growth of over 200 LCCs, providing employment for more than 3,000 Omanis in various sectors, including maintenance, logistics, and civil engineering.

To enhance SME development, PDO collaborates with Riyada, the Public Authority for Small and Medium Enterprises Development (PASMED), through a memorandum of understanding to offer training, business advice, and knowledge exchange. PDO also conducts workshops to educate SMEs about business processes, technical requirements, and health and safety standards, encouraging local vendors to bid for contracts. These workshops cater to SMEs at different stages, including those new to PDO and those that have previously bid unsuccessfully.

PDO recognizes the significance of SMEs in economic development and the need to promote innovation and entrepreneurship among Omani youth. PDO is developing a Vendor Development Programme, including youth development support, in collaboration with other operators and the Ministry of Oil and Gas. Additionally, PDO's new Technology and Research and Development Lead position aims to foster innovation and link SMEs with PDO's technical challenges. By supporting SMEs through various programmers and promoting the Joint Supplier Registration System (JSRS), PDO aims to build a competitive and sustainable SME sector, creating high-value career opportunities for the youth and ensuring Oman's economic competitiveness and attractiveness for foreign investment. The current challenge is to advance and ensure compliance with the recent royal decree, which requires PDO to dedicate at least 10% of their contracting and procurement budget to SMEs.[4]

In this tender, "Integrated Field Catering & Facilities Management Services", CONTRACTOR E shall consider 10% of their award to the SMEs at the price of $25,551,091.

4. PDO will do all it can to foster SME development: Abla Riyami | OERLive – OER Live | Oman.

In addition, the performance report for SMEs and/or LCCs shall include the following:

1. The scope of work is included in the SME/LCC subcontract.
2. The value of work done by SME/LCC during the period compared to that planned.
3. Actual amount paid to each SME/LCC during the period and cumulative paid to date.
4. Percentage of value of work paid to SME/LCC to date against total LCC value of the parts of the work over the contract period.
5. Any training or development areas attained by SME/LCC.
6. Improvement initiatives, if any, carried out by the SME/LCC contractor.
7. SME/LCC Omanization percentage for senior management, professional, supervisory, and skilled/semi-skilled.
8. HSE performance.
9. Overall performance of the LCC and contractor.

The company shall have the right to audit all documents and information reasonably required to monitor ICV performance by contractors and/or subcontractors including full access to:

1. SME/LCC tender records issued via BGeTS relating to the contract, including SME/LCC tender documents issued by the contractor, bidder proposals, clarification questions and answers, and details of awards made to SMEs/LCCs (see detail: https://www.scribd.com/document/704377918/C7-ICV).
2. Evaluation models and results, justifications for any disqualifications and awards (particularly if not awarded to lowest bidder), and copies of any subcontracts (including all commercial information) awarded by the contractor to SMEs and/or LCCs.
3. Any additional information or documentation in any format reasonably required by Company to monitor ICV performance by the contractor and/or subcontractors.

If the contractor fails to comply with its ICV obligations, the contractor shall within 30 days' notice from the company of non-compliance submit a detailed written explanation for the failure together with the contractor's corrective action plan to remedy such non-compliance ("Remediation Plan") for approval by Company. After the company's approval, the contractor shall thereafter diligently and expeditiously implement and deliver such a Remediation Plan.

If still in the event any deliverable or milestone detailed in the Remediation Plan is delayed by more than two months, the senior management of Company and the contractor shall meet at Company's premises to discuss the importance of ICV and agree a further Remediation Plan. The company shall be entitled to suspend or terminate the contract and Company shall be entitled to suspend the contractor from bidding for future contracts with Company (see Table 8.15).

Table 8.15: Small and medium enterprise categories

Company Size	Number of Employees	Annual Turnover (R.O)
Micro	1 to 5	Less than 100,000
Small	11 to 50	150,000 to 1.250 Million
Mediom	51 to 150	1.250 Million to 5 Million

Source: Ministry of Commerce, Industry, and Investment Promotion has updated the definition as per Article 3 of Resolution No. 56/2023

G: 1.2% Oil and Gas Industry Training Levy

PDO successfully arranged for several training programmes from internationally recognized organizations to be conducted locally, encompassing fields such as engineering operations, drilling rigs, mechanical maintenance, and lifting operations. These programmes, certified by the Ministry of Labour, helped to create new employment opportunities and bridge skill gaps in the market. Additionally, over the past three years, a total of US$51 million has been spent through main contractors to train approximately 18,000 Omanis in various disciplines, including HSE, human resources, finance, and technical and development programmes, which also encompassed scholarships and internships.[1]

Article 8.1.1 states that on November 11, 2018, major oil and gas operators received instructions from the Ministry of Oil and Gas (reference: MOG/US/002/2018/6485) to implement the Oil and Gas Industry Training Levy. The goal of this training levy is to create more job opportunities for the Omani workforce within the oil and gas contractor community by funding the training of Omanis in skilled and semi-skilled roles. As a result, as of January 1, 2019, all new contracts include a provision for a 1.2% training levy to be deducted from the net amount invoiced to contractors. This is detailed in Section C5, Schedule of Rates/Prices, with additional information available in Section C7.[2] Hence, a 1.2% training levy from the tender prices shall transfer to the training institute "PDO's training institute".

In this tender, "Integrated Field Catering & Facilities Management Services", CONTRACTOR E shall pay for the training levy 1.2% of the total price of $25,551,091.

1. https://omanicv.om/wp-content/uploads/2022/03/ICV-Book-EN.pdf
2. https://www.omanobserver.om/article/66010/Front%20Stories/pdo-to-deduct-12-per-cent-of-contract-value-to-fund-job-creation

Chapter Summary

In conclusion, PDO's comprehensive ICV strategy, its integrated tender process, and focused initiatives on SMEs and workforce development are pivotal in driving economic growth and sustainability in Oman. By prioritizing local value and capacity building that is retained in the economy, PDO not only fulfills its corporate social responsibilities but also aligns with the national vision for economic diversification and long-term prosperity such as Vision 2040. This case study provides valuable insights and practical examples that can be applied in other contexts too.

References

PDO Tender Document C7 & T3 (https://www.scribd.com/document/704377918/C7-ICV)

Wealth Financial Consultants. In-Country Value Economic Model for Petroleum Oman Development (PDO): Benchmarking, Improvement and Way-Forward. 2024. Upon request from PDO.

Keywords Index:

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Alignment with national priorities
Alternative Schedule of Rates
Alternative Technical Tender
Approval of Tender Documents
Awarding of Contract
Audit information

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Questions from Chapter 8:

Comprehensive ICV Case Study

Questions from Chapter 8: Comprehensive ICV Case Study

A. Multiple Choice Questions

1. What does In-Country Value (ICV) aim to achieve in the context of PDO?

A. Increase reliance on foreign labour

B. Maximize economic benefits within Oman

C. Reduce training programs for Omanis

D. Limit local business development

2. Which of the following is NOT a pillar of PDO's ICV strategy?

A. Goods

B. Workforce

C. Tourism

D. Services

3. What is the primary goal of the 1.2% training levy implemented by PDO?

A. Increase foreign investment

B. Fund training for Omani workers

C. Reduce contract costs

D. Enhance expatriate benefits

4. What does the acronym "SME" stand for in the context of PDO's ICV strategy?

A. Small and Medium Enterprises

B. Sustainable Mining Enterprises

C. Strategic Management Entities

D. Social Market Economies

5. Which document must contractors submit alongside the Technical Tender?

A. A. Bank Guarantee

B. B. Performance Guarantee Letter

C. C. Form of Tender – Commercial

D. D. Identical un-priced copy of the Commercial Tender

6. What is the significance of PDO's EMDAD program?

A. Increase foreign worker employment

B. Develop and sustain local jobs in Oil and Gas

C. Decrease the number of SMEs

D. Limit technology transfer

7. How does PDO ensure compliance with ICV plans during contract execution?

A. Through annual reviews only

B. By requesting quarterly performance reports

C. By imposing immediate penalties for non-compliance

D. By providing leniency for the first year

8. What is the purpose of the Tender ICV Dashboard?

A. Evaluate tender bids solely based on price

B. Track ICV plans and calculate retained ICV value

C. Monitor international trade agreements

D. Assess environmental impact

9. What role does Riyada play in PDO's ICV strategy?

A. Regulate foreign investments

B. Offer training and business advice to SMEs

C. Manage PDO's oil extraction processes

D. Oversee expatriate employment

10. How does PDO support SME and LCC development?

A. By reducing their project scope

B. By providing training and fostering long-term relationships

C. By eliminating their involvement in major projects

D. By focusing solely on large international suppliers

B. Short Questions

1. Explain the role of the Technical Tender (T3) and Commercial Tender (C7) in PDO's tender process. How do these documents contribute to the evaluation and awarding of contracts?
2. Discuss the significance of PDO's collaboration with Riyada and the impact of this partnership on SME development within Oman.

C. Essay Questions

1. Analyze the effectiveness of PDO's ICV strategy in promoting economic diversification and sustainable development in Oman. Consider the various pillars and initiatives outlined in the case study.
2. Evaluate the challenges and opportunities presented by the mandatory 1.2% training levy for PDO and its contractors. How does this levy align with the broader goals of workforce development and economic growth in Oman?

In-Country Value Application

Understanding ICV Pillars and Practices

In Country Value Strategies	Dr. Hidaya Al-Lawati
In-County Value: The Pillar of Investment	Dr. Zakeya Sanad
In-County Value Pillar: Workforce	Dr. Iram Fatima Al Ansari
In-County Value Pillar: Local Sourcing of Goods	Dr. Yasir Al-Balushi
In-Country Value Pillar: Services	Dr. Hilal Al-Sawai and Dr. Mohammad Rezaur Razzak
Technical and Commercial Evaluation	Dr. Ramo Palalic
Managing Tenders for Public Procurement	Dr. Mohammad Rezaur Razzak
Comprehensive ICV Case Study	Dr. Hilal Al-Sawai and Dr. Ahmed Al-Hadi



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