ANNUAL RESEARCH WORKSHOP REPORT 2017

THEME: WHY INSTITUTIONS MATTER FOR INDUSTRIALIZATION-LED DEVELOPMENT

REPOA

157 Mgombani Street, Regent Estate

P.O. Box 33223, Dar es Salaam, Tanzania

Tel: + 255 22 2700083,

Fax: + 255 22 2775738

Website: www.repoa.or.tz

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1.0 INTRODUCTION

REPOA's Annual Research Workshop (ARW) is the biggest research event in Tanzania that provides a forum for in-depth debate about development issues. The workshop brings together leading researchers and policy makers from around the world to critically explore major development challenges for Tanzania. These include how the country's development relates to the dynamic global economy, balancing the need for rapid growth with longer term development objectives and consideration of appropriate policy instruments for accelerating the kind of economic and social transformation which will lead to inclusive development.

REPOA's 22nd Annual Research Workshop took place between 29th and 30th March 2017. It explored the theme of ***"Institutions for industrialisation-led development in Tanzania.***" The theme of the workshop is timely. This is because the Fifth Phase Government is committed to promoting rapid industrialization in order to diversify the economy and create productive employment. The workshop theme was thus selected to inform the wider policy objectives of the Government of Tanzania as set out in Vision 2025 and the Second Five Year Development Plan (FYDP II).

Over 350 leading national and international scholars, policy analysts and practitioners, civil society organizations, research institutions, development partners and political leaders attended the event. Together, they examined the key institutional issues which need to be addressed in order for industrialisation-led development to become a reality in Tanzania.

2.0 BACKGROUND TO WORKSHOP THEME

Tanzania expects to attain middle income status by 2025. Industrialisation is central to this ambition. The FYDP II 2020/21 aims to increase the proportion of manufacturing in the GDP from 5.2 per cent in 2015 to 12.5 per cent by 2020, and the share of manufacturing employment from 3.1% in 2014 to 5.4% by 2020.

The viability of industrialisation-led development in Tanzania in the context of globalisation and widespread de-industrialisation is uncertain. Structural transformation on a massive scale is necessary for Tanzania to transit into an economy in which manufacturing value added accounts for a greater proportion of GDP, and employs a significant number of people. A detailed analysis of the fundamental institutional conditions for rapid transformation which takes into consideration the complexities of the global economy and the specific circumstances of Tanzania is deemed crucial.

Tanzania has recorded a sustained economic growth over the past decade, but levels of poverty have declined only marginally. While the contribution of agriculture to the GDP has declined in recent years, it remains significant in terms of labour force engagement. Increases in industrial productivity have been achieved through the expansion of production in a few larger companies oriented towards domestic markets, and diversification of exports have been recorded in recent years as the share of manufactured goods in total exports has increased.

Manufacturing competitiveness at levels sufficient to reduce trade imbalances in manufactured commodities has not been attained. The expanding natural resources sector has considerable potential to contribute to industrialization through value addition such as mineral beneficiation and supply of efficient energy. This has yet to be realized. Its overall contribution to GDP and job creation is still small.

The workshop explored the characteristics of effective institutions in relation to the dynamics of industrialisation-led economic development, through the discussion of a keynote address, three thematic expert panels, and discussions on 20 research papers. Delegates were encouraged to share ideas and to debate emerging issues, and particularly on the existing institutional constraints to accelerated industrial development and to recommend various policy options.

This report presents an overview of key issues raised at the workshop and the implications for Tanzania, including some recommendations. *Part 1* presents an overview synthesis of the opening and keynote presentations. *Part 2* highlights key analytical contributions of panels and conference papers. *Part 3* provides a summary of key policy implications and suggestions for further research.

3.0 PART 1: OPENING AND KEY NOTE

The **Executive Director of REPOA, Dr Donald Mmari** welcomed delegates to the conference. He thanked development partners and in particular the European Union for supporting the workshop and other development partners who has continued to support the work of REPOA in policy research and analysis in Tanzania. Dr Mmari emphasized that REPOA's mandate is to carry out independent and credible research, to share findings and to proactively engage in supporting the government in implementing its programmes through accurate, timely and credible analysis. He thanked the Government of Tanzania for providing an enabling environment for carrying out research, and for using research outputs in many of its development policies and programmes.

Dr Mmari acknowledged the efforts and hard work of the 5^{th} phase Government in accelerating socioeconomic transformation. He noted that Tanzania has remained one of the fastest-growing countries in Africa, averaging 6.9% annually over 2011-2015, above 5.3% average growth for East Africa despite the effects of slow global economic growth.

Evidence presented at the 2016 Annual Research Workshop on the theme '***Making Industrialisation Work for Socioeconomic Transformation'*** drew on the success of recently industrialized countries of South East Asia, which showed how governments can play crucial roles in addressing persistent development challenges. These challenges include low productivity, growing urbanization and expanding informal economy. These cannot easily be dealt with in a pure market structure. He reminded delegates that a deeper understanding of institutions and political economy underpinning the development process in general, and the industrialization agenda in particular, is central to informing the design of effective government interventions.

H.E. Roeland van der Geer, Head of the EU Delegation to Tanzania and the East African Community, spoke on behalf of development partners. He emphasised the importance of effective institutions for industrialisation and the need for on-going consultation between all those involved in achieving this. He reminded delegates that a conducive investment climate is enabled by a clear, open and predictable environment which had to be created by the government and the private sector working together.

Mr van der Geer noted that industrialisation was not a new policy priority in Tanzania. Lessons could be learned from earlier efforts including the need for stability, policy coherence and good sector policies. He continued to argue that there are strong grounds for optimism. Tanzania is well endowed with natural resources and there is considerable potential to add value through agro processing. Developing trade agreements with international partners, including the European Union, offers a promising opportunity. He also emphasised on the need to synchronize trade, agriculture, and industrial policies. European Union investors are keen to support Tanzania develop particularly in the sectors of energy, agriculture and industries.

Prof Maj Gen (Rtd) Yadon M Kohi, Chairperson of REPOA Board of Directors, welcomed the Guest of Honour, Hon. Dr. Philip Mpango, to give his opening speech to over three hundred delegates, including members of parliament and development stakeholders. Major General Kohi made the point that everybody had some experience on institutions and could bring this experience to the discussions. He invited Hon. Dr Mpango to address the audience.

The Guest of Honour, Hon. Dr. Philip Mpango, Minister for Finance and Planning represented the Prime Minister, the Right Honourable Kassim Majaliwa, who was the guest of honour. The Minister explained the importance of industrialisation for inclusive development in Tanzania, which appears to have gone through de-industrialisation since the late 1980s.

Tanzania had previous industrial strategies in the years immediately after independence. It had pursued an active import substitution policy, but subsequently industrialisation declined as a result of unfavourable economic conditions and the effects of some of the structural adjustment polices.

Recognition of the scale of structural transformation necessary to increase productivity and alter the basis of the solid economy means that industrialisation is once again a policy priority despite sustained economic growth. Dr. Mpango informed delegates that the Five Year National Development Plan 2015/16 -2020/21 identifies six industrial sectors with strong backward and forward linkages among key sectors of the economy as the focus of initiatives to boost industrial productivity and sustained growth.

The Government is undertaking necessary steps to enhance an enabling environment for investment and to foster the growth of the industrial sector. Investments in infrastructure, the extension of electrification, particularly in rural areas, and reducing bureaucracy to increase the easy of doing business are underway with promising results. The potential for structural change are significant, and in recent years the share of GDP deriving from non-traditional exports, including manufacturing is rising.

Dr. Mpango informed delegates that despite this progress, achieving broad based growth through industrialisation-led development is not very easy. The gains from economic growth are not evenly distributed. The majority of the population are engaged in smallholder agriculture, where productivity remains low. Almost one third of the population live below the basic needs poverty line.

He pointed out that although a number of interrelated factors inhibit the establishment of a sustainable industrial sector in Tanzania, the place of institutions is critical. Institutions are important because, as the formal or informal `rules of the game', they structure the behaviour and expectations of people in a society. Institutional frameworks therefore shape the way in which people behave and is central to changing the economy.

The Minister informed delegates that the Government of Tanzania is actively considering ways in which institutions enable or constrain development processes. The President H.E. Dr. John Pombe Magufuli is making a concerted effort to reduce risks which are presented by some informal institutional arrangements with damaging effects on society and economy in Tanzania. Recent initiatives to penalise individuals engaged in corrupt practices is just a one example.

The Government recognises that addressing negative effects of informal institutional arrangements is insufficient to provide the change needed to consolidate Tanzania's path towards inclusive development. The most important question for the Government, and which he requested workshop delegates to answer is: **What kind of institutional architecture is necessary to accelerate industrialisation-led development in Tanzania?**

This could be broken down into three questions. First, what forms of institution are the most enabling? Second, what can be learned from the experience of other countries which have recently gone through similar stages of industrialisation? Finally, what are the complementary roles of the state and market institutions in achieving inclusive industrialisation led development?

In closing, the Minister thanked REPOA for contributing to policy dialogue in industrialisation, a very timely and relevant subject. He stated that policy dialogue is an essential public good in a modern society. He congratulated REPOA for being ranked as the leading think tank in Tanzania and its increased position in the ranking of think tanks in Africa, and thanked development partners and organizations that have continued to support REPOA.

The keynote address titled 'The Difficult Growth Dynamics of a Deals World' presented by Professor Lant Pritchett of the Kennedy School of Management at Harvard University examined the contribution of institutions to growth dynamics in developed and developing countries. Prof. Pritchett demonstrated that the relation between institutional form and economic growth is not linear by showing how institutions exhibit remarkable stability while economic conditions change substantially over long and shorter periods of time.

Sustained growth is exceptional in any economy. However, emerging economies generally experience distinct phases of growth and decline, despite apparent institutional stability.

He explained the range of factors which contribute to growth in emerging economies, including the capability to support increased product complexity on which higher value goods depend. This capability arises from economic factors, including agglomeration and the availability of flexible skills, but institutional factors play a critical role in assembling the necessary inputs that product complexity requires.

Prof. Pritchett emphasised that capability rather than form was paramount. Both informal and formal institutions could achieve high capability but informal institutional arrangements were less predictable. Predictability and stability were essential for creating the environments in which growth was likely to occur.

Thinking about institutions in terms of capabilities to address specific problems was a more useful starting point than imposing institutional form, but institutional form is important in trying to move towards greater predictability. Achieving institutional capability and greater predictability do not automatically result from a move from *deals-based* to *rule-based* organisations. Prof. Pritchett showed how inclusion, transparency and predictability are the foundations of effective and enabling institutions.

He raised three issues which were followed in the deliberations during the workshop. These were: first, the difference between formal and informal institutions and the ways in which even formal institutions can be undermined through informal practices; second, the question of institutional capability rather than form; and third the non-linear relationship between economic growth and institutions.

Discussants reflected on the keynote speech in relation to Tanzanian context. **Professor Benno Ndulu, Governor of the Bank of Tanzania**, remarked on the importance of reflecting on policy changes in understanding the economy. Tanzania had undergone a number of distinct policy regimes since independence which had different implications on institutional development. While this had contributed to resilience to economic shocks, it underscored the importance of policy and institutional stability which would be essential to increasing product complexity. Professor Ndulu reiterated the need for predictable, clear and unambiguous rules and effective implementation to cut down on deals-making and practices that undermine development. He also underscored the importance of transparent ways of changing the rules, and fairness and efficient system of adjudication in interpretation of rules.

Mr. Gwakisa Bapala, Manager Research and Planning representing the **National Economic Empowerment Council** (NEEC) reiterated the need for rules and norms and predictable, patterned behaviour. He informed the audience that NEEC is taking steps towards addressing the kind of issues raised in the keynote presentation but the question remains as to whether Tanzania is a “rules” world or a “deals” world. He explained that more inclusive policies and engagement in policy formulation can help address some of these constraints that limit empowerment, and that on-going government efforts to improve capacities of its human resource, and outsourcing where appropriate will help to bring about improvements in institutional capability. He also supported the need for strengthening institutional capability to implement policies, and not just to formulate them.

Dr Ramesh Shah, representing the private sector, emphasised that it was important to identify the most limiting constraints and to ensure that the systems of rules designed to strengthen institutions do not negatively affect the functioning of other institutions with which they work and interact in the production and exchange. He highlighted the role of policy regimes in affecting the direction of industrialisation and economic growth, the importance of effective implementation and the need for predictability in rules enforcement.

4.0 PART 2: KEY ISSUES AROUND THE THEME: INSTITUTIONS, INDUSTRIALIZATION AND ECONOMIC PERFORMANCE

4.1 TRAJECTORIES OF INDUSTRIALIZATION

Panels and papers presented at the workshop explored different aspects of the relation between industrialisation and development on the one hand and institutions and economic performance on the other. Papers by Shayo et al, Osberg, Pritchett and Momoh presented convincing evidence that relationships are neither linear nor certain.

Industrialisation did accompany economic development in Western Europe and North America in the nineteenth and twentieth centuries. However, accelerated economic growth in those countries was not simply a result of industrialisation. It was enabled by geopolitical and political economic factors which gave certain countries monopolies in high demand products, such as textiles. Market protections and colonialism provided access to markets which allowed national industries in countries like Britain and the United States to flourish.

The paper by Shayo, Singili and Coulson showed how open intellectual property regimes in the early phases of industrialisation enabled new entrants to industrial production to establish factories, appropriating the fairly simple industrial technology developed elsewhere. The machineries which enabled the initial waves of industrialisation were made locally by skilled craftspeople. Individuals and small firms could move into industrial production without access to large scale investment or new forms of financing.

As technology became more sophisticated production become more complex and diversified. This required more and longer term investments in plant, infrastructure and people. Better institutions were essential for establishing the investment structures which could enable industrial expansion. The role of the state was central. For example, the government of Germany under Chancellor Bismarck promoted the emergence of formal and informal institutions which benefitted industrialisation. Strong relations between individual investors who occupied positions of influence on the boards of industrial firms contributed to an entrepreneurial eco - system comprising individuals who had knowledge of industrial development in different sectors but who could link diverse firms.

The papers showed that the relation between financial systems and management expertise was also central to accelerated industrialisation in Japan and South Korea. These countries rapidly closed the gap between themselves and the already industrialised nations of Europe and North America through assertive state action. This encompassed a defined industrial policy, strong protectionist measures, including tariffs on imports, and a board structure for the governance of companies which ensured that experience across industries was shared. Clustering of related industries was encouraged and actively supported.

Roelfsema and de Bell's paper on entrepreneurial ecosystems also emphasised the role played by agglomeration and relationships among entrepreneurs in promoting industrial development. They demonstrate that developing relations between firms creates an entrepreneurial eco system in which industrialisation can flourish, noting that while the intellectual property regimes encourage innovation, they can also increase the costs of technology transfer for newly industrialising countries.

4.2 LIMITS TO FAST TRACKING INDUSTRIALIZATION

Some papers presented clear evidence from a number of countries that sound institutions in themselves cannot sustain an industrial sector in the face of global competition, reduction of trade barriers and unpredictability of demand. Structural changes in the global economy mean that the kind of rapid transitions experienced by South East Asian states in the second half of the twentieth century towards industrialisation may no longer be possible.

There are several reasons for this. Market liberalisation, reduction of tariffs and reduced protection for domestic markets mean that locally manufactured products have to compete with imported goods on quality and price. Extension of industrial capacity in South East Asia and the ability to produce high quality goods makes it difficult for newly industrialising countries to become industrially competitive particularly in manufacturing.

State involvement in the industrial sector in South East Asia has been extensive. Governments have also invested in skills development, including higher education. Madina Guloba showed that sixty per cent of investment in Taiwan's industrial research and development came from government sources. Market forces alone cannot generate sustained industrialisation. States need effective industrial policy and to invest in skills, research and development and infrastructure.

4.3 INSTITUTIONS AND THEIR DESIGN

While capability of institutions to implement is desirous, as the keynote address suggest, the design of institutions matters, and often explains why policies fail. Institutions enables best practice, capacity strengthening, and political will, which together provides strong institutional foundations for growth. Some panelists argued for the need for strong state agencies, comprised of professionals who can supplement the rules by understanding the needs of multinational institutions and other private sector entities to accelerate investments in ways that respond effectively to local content and long-term capability development. This would require strategies for building organizational capabilities, making them performance driven in implementing policies and fulfilling their mandates. Industrial policy can, therefore, work if well designed, supported by autonomous, responsible and rule governed agencies, with a combination of good policies that takes into account the global industrial and trade dynamics and the global economic structure.

An equally important driver of well-functioning institutions is the incentive design. For example, the benefits workers derive from improvements, upgrading and learning to expand exports makes a difference.

4.4 JOBS, TECHNOLOGY AND DE-INDUSTRIALIZATION

New production technologies also play a role. Global demand for unskilled labour is falling as a result of changed production processes, a trajectory likely to continue as the use of robots becomes commonplace in industrial production. Lars Osberg showed that, due to these changes, even previously industrialised countries such as Canada have difficulty in sustaining industrialisation once it declines.

Extensive state support and an active industrial policy designed to take advantage of proximity to North American markets fueled Canada's industrial growth up to the 1970s. The 1980s onwards has been characterised by a decline in industrial production.

Although Canada has made some progress in recovering its manufacturing capacity, including diversification into new technologies, levels of industrial production have not reached their previous peak, and they are unlikely to do so.

The situation of advanced industrial economies such as Canada's which has a highly educated workforce and an established education system including provision of vocational training is salutary in prompting reflection about the viability of the current wave of pro-industrialisation policies in Africa.

Canada's experience of industrial transformation brought about through changed production technologies highlights important realities regarding labour which are likely to affect those sections of Africa's industrial sector driven by foreign direct investment in natural resource extraction and manufacturing.

Advanced production technologies and robotics reduce the need for unskilled jobs. The opportunities they create are for fewer but better skilled operators who can manage the complex requirements for oversight and technical adjustment that computer operated production processes entail.

Countries which have successfully adapted to the new demands of industrial production in high technology settings have invested in agile systems of education and training which prioritise the acquisition of problem solving abilities.

The experience of de-industrialisation in Canada offers essential insights for Tanzania as it renews its commitment to industrialisation led development. First, even if industrialisation raises productivity in some sectors it may not generate large numbers of jobs for unskilled workers. Expectations that industrial growth will be able to absorb surplus labour deflected through agricultural productivity gains may not be realistic.

Second, without substantial changes in the education system and the availability of high quality technical training, newly established industries will struggle to locate a sufficiently skilled workforce.

Finally, successful industrial economies depend on complex networks of firms often clustered within the same geographical regions or which have access to flexible supply chains and good infrastructure. Such relationships create the economies of scale which deepen the pool of components, capital and skills needed to produce high quality goods.

4.5 MAKING INSTITUTIONS CAPABLE

Comparative analysis of growth dynamics in a range of countries sheds light on the role of institutions in economic growth. Presentations by Isser and Pritchett showed how development reforms to date have largely prioritised institutional form over enhancing capabilities for policy implementation.

The kinds of institutions necessary to facilitate growth in one sector of an economy have different requirements from those which would be necessary in another. Building institutional capabilities cannot be imposed through top down templates of organisational form. They have to be developed in conjunction with the evolving economy. The challenge for governments is to support the frameworks through which organisational capability for policy implementation can evolve sustainably and flexibly.

The manufacturing sector needs high levels of institutional capability which can assemble the different inputs needed to make complex products. Building the right institutions for some sectors, such as the natural resources sector is more straightforward than for other sectors.

Pritchett's analysis has important implications for Tanzania's industrialisation strategy. Achieving sustained levels of economic growth is extremely difficult. It involves continued expansion of the range of what can be produced while extending the capabilities of existing institutions.

Tanzania's current economic positioning makes this harder, and thus require concerted efforts to be able to compete with other countries in the SADC region that are further ahead in establishing industrial capability.

Tanzania's industrial policy prioritises agro processing and textiles where there is strong local demand. The targeting of interventions in these sectors may not be sufficient to address consolidated structural disadvantage in industrial production.

Agro processing of primary exports and failure to move into new domains of product complexity perpetuates Tanzania's position as a producer of low value products where value addition is minimal.

The evidence presented in the papers shows that institutional capabilities are product specific. A problem based approach is needed in order to develop more effective institutions. Sustainable industrialisation depends on product diversification.

4.6 LESSONS FROM OTHER AFRICAN COUNTRIES

Other countries in the region face similar challenges. Like Tanzania, Uganda places industrial development at the centre of its national development plan. Uganda aims to increase exports from manufacturing from 5 to 19 per cent by 2020. The paper by Madina Guloba explained why this is proving difficult.

The bulk of economic growth in Uganda is driven by construction related services and mining and quarrying industries which are financed through foreign direct investment. The majority of enterprises are in the informal sector. Government efforts to stimulate agro processing have failed to deliver anticipated gains due to poor infrastructure, lack of attention to product quality and weak producer links.

Ama Pokuaa Feny and Epifania Langa explored the similar challenges faced by Ghana and Mozambique, where growth in manufacturing is weak or stagnant. In these countries, industry is regionally concentrated. Spatial inequalities cannot be addressed through simple decisions. Successful industries need transport links, access to labour and other inputs which are not likely to be in place in more peripheral locations.

National development plans may be overly ambitious about the pace at which industrialisation can be achieved. Creating conditions in which industrial development can occur requires better alignment between sector ministries. Producer linkages are key to successful investment.

4.7 MAXIMIZING REGIONAL VALUE CHAINS

Several papers considered the potential of regional integration to support the industrialisation process through value chain linkages and economies of scale. Papers by Simon Roberts and Shingie Chisoro Dube demonstrated that these opportunities are insufficiently realized among SADC states. Most continue to depend on imports and have substantial trade deficits even in sectors where raw materials could be sourced within the region.

The animal feed to poultry value chain in the southern Africa region provides a good example. Dube’s paper explored how poultry feed is imported from Brazil and the Netherlands even though Zambia produces surplus soya and maize and is starting to export oil seed cake. Non-tariff trade barriers such as regulation within the Southern African countries inhibit intra-regional trade in animal feed, as well as the intra-regional trade in processed poultry much of which is imported.

Similar contrast affects the sugar, cement and fertiliser industries. High subsidies in developed countries render the use of regionally produced sugar prohibitive. Confectionary industries are underdeveloped despite high demand for confectionary products which are imported from Brazil and China. The regional confectionary sector relies on sugar imports.

Effective industrial policies demand a regional perspective which can catalyse the economic opportunities presented by regional value chains. Current national industrial protection measures not only limit regional trade. They inhibit the evolution of strong national industries which are strategically situated to gain advantage from the cost benefits of regional value chains.

Industrial and trade polices need reformulation to maximise opportunities presented by regional value chains.

4.8 RESOURCE BASED INDUSTRIALIZATION

Several papers considered the institutional factors which enable or inhibit industrialisation in the natural resources sector.

Whereas manufacturing depends on the emergence of entrepreneurial niches and diversified relations within complex value chains, the requirements of extractive industries are narrower. Effective governance regimes must be in place as well as access to modern equipment and skilled labour to upgrade into higher products complexity over time.

Industrial scale mining and the natural gas industry does not create large numbers of jobs. A high proportion of mineral processing takes place after the ore has been exported. Open cast mining using sophisticated machines requires small numbers of highly trained operatives.

The gas sector has similar requirements. Developing industrial capabilities in the natural resources sector necessitates accelerated skills development, investment in processing capacities and ensuring that revenues are utilised effectively by governments.

Stevan Lee's paper explored the risk of `Dutch disease' which could undermine the growth of productive sectors of the economy arising from Tanzania's newly growing natural gas sector. Because this sector will only ever grow to around 2 per cent of GDP these risks are minimal. According to Lee's analysis because Tanzania's manufacturing base is small the expansion of services generated through natural gas revenues will not have a negative impact on the development of industry.

Several papers emphasised the role of governments in ensuring that natural resource extraction results in resource based industrialisation. Governments have to ensure that linkages are developed along the value chain so that service and support industries have sufficient local content. This requires active interventions from governments and better local content strategies.

Botswana has managed to increase the productive capability of its national diamond's industry through coherent industrial development polices and on-going partnerships with diamond producers including joint ownership with De Beers in productive ventures. Value addition through cutting rough diamonds is now possible in Botswana with buyers coming to purchase high quality stones in country.

Technological development in Zambia and Zimbabwe's mining sectors is less promising. Protection of local industries has not resulted in investments in technical capacity. Foreign firms continue to dominate the supply chain.

Kaziboni's comparative analysis of national systems of innovation in the mining industries of Southern Africa showed how governments prioritisation of basic education has contributed to the lack of skills development in both Zambia and Zimbabwe. This is a lost opportunity for the consolidation of a robust mining service sector based on local capabilities.

Ensuring the sustainability of resource based industrialisation depends on multiple factors including the implementation of local content policies. It is not guaranteed, however, as the global market dynamics shifts considerably. The value addition potential of Botswana's diamond industry, for example, has been severely undermined by recent market shifts caused by financialization which has, in turn, shifted market demand from cut to rough gemstones.

Thus, in some cases, mining based industrialisation promises to increase GDP and state revenues but may have limited impact on employment. Bryceson et al's examination of the artisan mining sector showed how small scale mining employed an estimated 685,000 workers in Tanzania in 2012 compared to only 3,100 in the large scale gold mining sector. This sector, like small and medium scale industries more generally, has considerable potential for growth. It should be supported through targeted industrialisation policies.

4.9 INNOVATION, INVESTMENT AND LEARNING

It is clear from a number of papers that approaches to industrialisation-led development which rely on exploitation of comparative advantage as in the natural resource sector will not generate sustained growth in the longer term. Increasing product complexity is essential. Where this is not viable due to high barriers to entry, among other factors, there are other possibilities of exploiting emerging opportunities at the base of the pyramid.

Onsongo showed how initiatives which adapt existing niches and creatively foster innovative product development have yielded promising returns in such areas as solar power and mobile applications. Other opportunities for industrial development exist in servicing existing supply chains in the medical sector, in plastics, foodstuffs and construction materials.

Verhoogen's research on small scale industrial production in South Asia showed how adaptation can be constrained or enabled by incentive structures within firms. Engagement in export markets can promote learning and improve the quality of products.

Developing small and medium sized firms offers options which are less reliant on large scale investment for which resources are limited. Shayo et el described the constraints facing investment banks in Tanzania. Lack of capital restricts lending capabilities. Pension funds are searching for investment opportunities outside the industrial sector where risks are perceived to be high. In addition, the amount of loanable funds available for long-term financing by Pension funds is also limited by regulations. Foreign direct investment is essential for large scale industrialisation in Tanzania as has potential to minimize investment financing gap.

The survey conducted by Bourginon and Kinyondo shows that institutions in Tanzania are quite effective but there remain many areas of concern. These include difficulties in accessing land for investment purposes, making investing in Tanzania unnecessarily very costly. Furthermore, corruption and bureaucracy adds into the cost of doing business.

5.0 CONCLUSION FROM PLENARIES

Plenary sessions and panel discussions returned to the overall theme of institutions for industrialisation-led development. Although the relationship between institutions and economic development is not straightforward, clear lessons emerged from comparative experiences across a range of industrialising countries.

First, the state plays a critical role in industrialisation. Successful industrialisation cannot be left to the market forces. It requires an active industrial policy and substantial economic investment.

Second, the content of industrial policy matters for inclusive development. Governments have to take proactive steps to ensure that industrialisation is inclusive and supportive of opportunities within the value chains and in producing more complex products.

Third, functionality and capability of institutions matter more than form. Institutional design must be problem driven. Functionality is not a simply a matter of design, but a desired outcome made possible through the political relations in which an institution operates.

Fourth, specific institutions can be made to work more effectively to support the industrialisation process. John Sutton's experience of Ireland and Singapore, for example, show what can be achieved with Local Content Units and Investment Authorities to maximise the potential results from foreign direct investment. These agencies focused on building relationships, linking foreign with national firms that needed new technologies and ways of working.

Fifth, effective policies must be relevant to national contexts. They must be aligned to sectoral policies and priorities, and respond to the strategic requirements of regional and international value chains.

Sixth, the comparative experience from a number of African countries with very similar National Development Plans underlines the need to have realistic industrialisation policies which are informed by national political and economic conditions. Implementation is paramount. Governments have to make proper use of the range of institutions which shape the context of industrialisation. These include competition authorities, investment agencies and the regulatory frameworks which can offer much needed protection for emerging industries in an appropriate context and time frame.

Seventh, while states have an active role to play in directing and creating the enabling environment for economic development, it does not amount to controlling the business activities excessively. Too much political control, for example, can lead to bad decisions such as the political selection of sites for industrial development, and distortions in the efficiency of markets.

Institutions such as investment agencies operate best with clear objectives and the autonomy to implement them within strong regulatory frameworks.

5.1 WAY FORWARD

The workshop closed with a final session considering the way forward which took into account questions raised by delegates, including the nature of industrialisation. Industrialisation can mean the development of productive manufacturing at a larger scale or it can mean generalized increase in productivity through greater value capture in the lower segments of the value chain.

Both types of industrialisation are taking place in Tanzania. They have different implications. There is a risk that current policy focus underplays the contribution of the small and medium enterprises which make the greater contribution to manufacturing and provide the most livelihood opportunities for the greater number of Tanzanians.

Lars Osberg addressed some of these concerns as he raised some areas for possible future research, noting the substantial economic significance of the domestic construction sector. He congratulated Tanzania for the enormous development progress the country has made since the 1960s.

Highlighting the situation of the global economy in a context of competition and liberalisation, Osberg reminded delegates that the options for industrial policy in 2017 are very different from the previous times in Tanzania's history. He emphasised the urgent need for Tanzania to reinvest in skills development and the education system that is appropriate for the type of industrialisation envisaged, and to consider diverse ways in which entrepreneurs can access the capital they need to invest in small and medium scale businesses.

6.0 PART 3: KEY POLICY IMPLICATIONS AND AREAS FOR FURTHER RESEARCH

6.1 POLICY RECOMMENDATIONS

The essence such a high level workshop as REPOA's ARW is centered on the need to provide policy recommendations which can be internalized by the government in its quest for socioeconomic transformation. This is where research intertwines with policy action to create tangible impact and outcomes. It is in this context that the following key policy issues have been drawn from REPOA's the 22nd ARW:

First, successful industrialization in Tanzania needs state investment and an active industrial policy, because market forces alone cannot generate sustained industrialization due to a multitude of externalities and coordination failure

Second, Industrialization through manufacturing has high barriers to entry. De-industrialization is hard to reverse, even in industrialised economies

Third, value addition through agricultural processing alone will not lead to sustainable industrialization path. Producing more complex products is essential for competitiveness, but this will require more aggressive strategies to build local technological and innovation capabilities

Fourth, strategic investment should be focused on sectors where existing niches are established and relations between firms are strong, and where strategic insertion into global value chains is feasible

Fifth, regional integration offers potential instruments for industrial policy through promotion of regional value chains and intra-regional trade as a means for upgrading into complex products over time

Sixth, institutional reforms alone cannot not drive industrial development, unless they are accompanied by strong institutional capability for designing and implementing policies

Seventh, institutional capabilities are best developed in relation to specific problems and for supporting specific products or activities in the value chain. Template designs or "one-size-fits-all" don't often work.

Eighth, government needs to ensure the existence of effective independent Local Content Units and Investment Promotion/Facilitation Authorities

Ninth, governments have to balance between protecting emerging industries with commitments to open markets more strategically

Tenth, small and medium enterprises and artisanal mining merit increased policy attention and investment support

Eleventh, government has to address the issue of access to and cost of land for development purposes for both local and foreign investors. This will involve a large investment in land surveying, mapping, and compensation in order to make land for industrial projects readily available and at affordable cost

Twelfth, corruption needs to be combated constantly as it continues to increase the cost of investing in Tanzania

Thirteenth, the government has to create innovative options for making available long-term development finance that will match long-term investment needs and risk profiles of industrial ventures

Fourteenth, government needs to diversify the economy more broadly. While industrialization is vital for job creation, it will not be able to absorb the surplus labour from all sectors in the economy in the near term. Growth in other sectors such transport, construction, tourism, and agriculture will provide additional and necessary impetus to the manufacturing sector

Finally, the education system requires concerted action to improve the availability of skilled labour force in Tanzania in line with strategic growth sector demands.

6.2 EMERGING ISSUES FOR FURTHER RESEARCH

The following areas were highlighted as potential for further research to inform the development process for Tanzania:

First, the political economy of industrialization in Tanzania is not well understood. More research needs to be conducted on how small and medium enterprises grow and the factors which motivate investment in industrial production in Tanzania, along with institutional constraints.

Second, investors at different scales prefer to spread risks through diversification rather than scaling up. More research on investment decisions and factors driving those decisions would shed light on the economy of industrialization, and how diversification can be made more strategic rather than as a risk-mitigating mechanism.

Third, inclusive industrialization-led development remains questionable. The potential of industrialization to create livelihood opportunities in addition to formal jobs and strong local supply chains needs further research.

Fourth, the mechanism through which value addition in the mineral sector, both large scale and in artisanal mining can be increased needs further research.

Fifth, more research is needed on the impacts of trade policies on economic development including on industrialization.

Sixth, more research is needed on the factors which constitute institutional capability in Tanzania in terms of achieving specific outcomes rather than rely on the people’s perceptions. This includes the analysis of priority problems in industrialization requiring specific institutional solutions.

Seventh, industrialization is not sustainable in the absence of international trade. It follows that the role of monetary policy (including exchange rate effects) in supporting industrialization needs to be further explored. The trajectories of business development in Tanzania and the implications of changes in global trade for Tanzania’s trade model need to be investigated.