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Agricultural Transformation in the Near East and North Africa Region and the Challenge of Youth Employment and Migration

Executive Summary

This paper analyses the relationship between agriculture transformation and employment in the Near East and North Africa (NENA) region, where unemployment, particularly among the young generation, represents a fundamental challenge. The paper summarizes the origins of the problem and sheds light on policy reforms in agriculture and agroindustry that contribute to the elimination of the rural-urban gap in livelihoods and infrastructure, promote employment and reduce rural outmigration, taking into account the complex interlinkages between migration, agriculture and rural development. A three-pronged approach is proposed aimed at curbing poverty, increasing employment opportunities and ensuring inclusive agricultural transformation.

Suggested actions by the Regional Conference

- call upon member countries and other stakeholders to adopt and implement evidence-based agricultural transformation strategies;
- call upon countries to prioritize coherent policies aimed at closing the rural-urban gap, thereby contributing to the reduction of both rural and urban poverty and unemployment in particular for youth, while accounting for migration's drivers, impact and trends;
- recommend fostering public and private investment and financing to support agricultural transformation and generate economic opportunities, particularly for the young generation.
- prioritize the focus on value chain development and related service sectors to support economic growth and generate off-farm rural employment;

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leverage the food system for inclusive rural transformation through territorial, location-specific approaches

I. Introduction

- 1. Unemployment, particularly youth unemployment, is a key challenge in the NENA region, far exceeding levels in other regions and worsening since 2000. The root causes of this problem lie in some fundamental economic and demographic issues in NENA economies, recently aggravated by migration and internal displacements of the population as a result of prolonged conflicts that affected many countries of the region. First, structural transformation in the region has been biased toward capital-intensive mining and extraction industries, leaving less room for the development of labour-intensive manufacturing sectors, including agricultural processing and agro-industry (Box 1). In the NENA region, only 20 percent of agricultural production is processed and staple foods remain the priority of public spending. When combined with population and labour force growth rates that have exceeded those in other regions for decades, NENA economies have struggled to absorb newcomers in the labour market in sufficient numbers. The result has been high unemployment, particularly among youth and women.
- 2. Structural transformation, lying at the centre of economic development, has been a double-edged sword in the NENA region. In one respect, it signifies the transition to higher value production in industry and services, leading to economic growth and rising average incomes. However, if not accompanied by policies that facilitate agricultural and rural transformation (a shift away from traditional towards higher productivity agriculture and expansion of associated non-farm rural economy), it can open a sizeable rural-urban gap characterized by low labour productivity in agriculture, higher poverty in rural areas and disparities in education, health and other public services between rural and urban areas. The rural-urban gap hinders the economic development of rural areas by deterring investment, adding to rural unemployment and poverty. It is also fundamental in causing undesirable rural-urban migration that only adds to already high urban unemployment and poverty. A key policy foundation for diminishing unemployment and poverty in the region is therefore closing the rural-urban gap in livelihoods through more balanced development approaches.
- 3. This paper first analyses the structural transformation in the NENA region, demonstrating its connection to unemployment and internal/international migration. The paper then focuses on the rural-urban gap, characterized by differences in (a) productivity between agriculture and other sectors; (b) rural-urban income poverty; and (c) public services. The paper then highlights three groups of policy reforms that directly address the rural-urban gap in development and livelihoods: policies for agricultural transformation, for rural and territorial development, and for improving public services in rural areas. These policies illustrate how a focus on agriculture and rural development can be a catalyst for the overall development of the economy by reducing poverty, expanding employment and reducing the rural-urban gaps, therefore contributing to ensure that rural poor are provided with sustainable options and alternatives to migration.

Box 1. Key Definitions: structural and agricultural transformation, rural-urban gap

Structural transformation is the reallocation of economic activities away from the primary sectors (agriculture and natural resources) to industry and services. It is characterized by increasing income and productivities across sectors, expansion of the urban economy, a declining share of agriculture in gross domestic product (GDP), expanded domestic and international trade, and increased specialization and division of labour. If not accompanied by policies aimed at agricultural transformation, structural transformation leads to significant disparities in living standards and

poverty between rural and urban areas, underpinned by differences in labour productivity between traditional agriculture and industry and services.

The **rural-urban gap** is the disparity of living standards between rural and urban areas. It can be characterized by (1) differences in labour productivity (and wages) between traditional agriculture and industry and services; (2) higher levels of poverty in rural areas; and (3) less access to education and vocational education, health and other public services in rural areas. The rural-urban gap prompts increased migration of people from rural areas to urban centres.

Agricultural transformation is a shift from mainly traditional subsistence farming to commercial, highly diversified production systems. At the individual farm level, the process favours specialization, which allows economies of scale. The driving force of agricultural transformation is technological change on the farm, as well as in input provision, harvesting, storage and marketing. Transformation often includes a shift toward higher value added production, and often exploits new export markets. This process is embedded in the wider rural transformation process that also includes the emergence of livelihood and income-generating opportunities in the rural non-farm sector, including more access to services and infrastructure in rural areas.

Source: Adapted from FAO, 2017.

II. Unemployment in the NENA region

4. NENA countries show unemployment rates that are persistently higher than in other world regions particularly for young workers aged 15-24 (Table 1). This problem is acute in the middle income, as well as in some high-income countries of the region, and has worsened in some of them in the past two decades. The unemployment problem in the NENA countries is not limited to youth unemployment, however. It is a general phenomenon for most middle-income countries of the region that is particularly acute for youth and women.

Table 1 Total	female and youth unemployment averages	2000-2010 2011-2015 %	
Table L. Folal.	Temale and volum intemployment averages	. ZUUU-ZUTU. ZUTT-ZUTD. %.	

	Total		Female		Youth (15-24)		
	2000-2010	2011-2015	2000-2010	2011-2015	2000-2010	2011-2015	
High income							
Global	7	8	7	8	15	18	
Bahrain	1	1	4	4	5	5	
Kuwait	1	3	1	3	8	15	
Oman	19	18	38	35	47	46	
Qatar	2	0	8	2	9	1	
Saudi Arabia	5	6	15	21	30	29	
United Arab Emirates	3	4	9	10	9	12	
Upper middle income	_			-	-		
Global	6	6	6	6	15	15	
Algeria	18	10	34	17	35	25	
Iran (Islamic Rep. of)	12	11	18	18	24	25	
Iraq	19	15	30	25	39	33	
Jordan	14	13	24	22	31	32	
Lebanon	8	6	11	12	21	21	
Libya	19	19	30	28	43	46	

Lower middle income							
Global	6	5	7	6	13	13	
Egypt	10	13	28	35	28	35	
Mauritania	14	10	16	12	22	17	
Morocco	11	9	11	10	18	19	
Sudan	14	13	20	19	23	22	
Syrian Arab Republic	10	15	24	35	20	33	
Tunisia	14	17	19	24	30	38	
Yemen	15	18	22	38	28	32	

Source: World Bank, 2018.

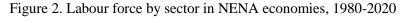
III. Structural Transformation and Unemployment

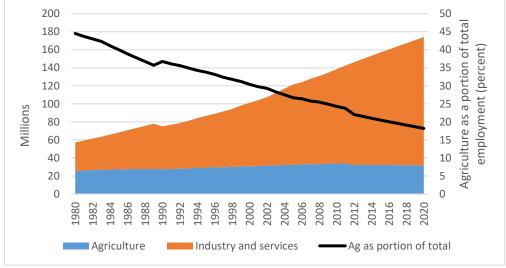
- 5. Structural transformation is at the core of industrialization and economic growth, and as each economy develops, its evolution is characterized by three main structural changes:
 - 1) A declining share of agriculture and an increasing share of industry and services in GDP and employment,
 - 2) A transition from high birth and death rates to low birth and death rates (the demographic transition); and
 - 3) Population migration out of rural areas, and mainly from rural to urban areas (urbanization) (Timmer, 2009).
- 6. While there is nothing inevitable about these changes, all developing economies undergo them to some degree or other as they industrialize.
- The evolution of GDP and employment in the NENA economies has been broadly in line with the pattern of industrialization in other regions. Between 1970 and 2015, average GDP per capita in the region grew by 143 percent (in 2005 United States Dollars), raising average living standards (UNCTAD, 2018). All three sectors, agriculture, industry and services, have grown in the past 45 years, though there has been much more growth in industry and particularly services. For this reason the portion of GDP originating from agriculture has slowly declined (Figure 1). The labour force has also shifted from agriculture into industry and services where the share of labour employed in agriculture declined from about 45 percent in 1970 to less than 20 percent in 2015 (Figure 2). However, there is still a lag in the shift of labour out of agriculture compared with the decline of agriculture's contribution to GDP. In 2015, 20.5 percent of the labour force was employed in agriculture but produced only 5.4 percent of the GDP. This implies that labour employed in agriculture is still far less productive than in other non-agricultural sectors.

2500 as a portion of total 2000 Billions of USD (2005 prices) 6 5 (percent) 1500 4 1000 Agriculture (Ag) 2 500 1 0 0 2010 2012 1974 1982 Agriculture Industry

Figure 1. GDP by sector in NENA economies, 1970-2015

Source: UNCTAD, 2017.





Source: UNCTAD, 2017.

A. The NENA structural transformation in comparative perspective

8. The structural transformation in the NENA region has shown the three main characteristics of transformations in other regions. However, it has differed in three key respects, each of which has contributed to unemployment. The first characteristic, the role of manufacturing in industry in the region, is significantly lower than in other regions (Figure 3). Industry has been biased toward capital-intensive mining and extraction industries, leaving less room for the development of labour-intensive manufacturing sectors.

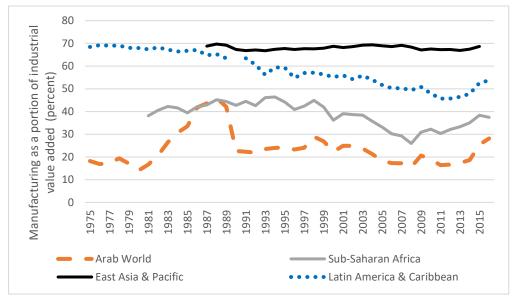


Figure 3. Manufacturing as a portion of industrial value added by region, 1975-2016

Source: World Bank, 2018.

9. The second characteristic, population growth in the region, has been higher than in any other region since the 1970s. High population growth rates in the NENA region and rural-urban migration have led to high labour force growth in the non-agricultural sector (Table 2). Rural migration can take different forms, including rural-rural migration and seasonal/circular migration. However, the majority of rural people in the region, and especially the youth, tend to move from rural to urban areas and mainly in search of better employment opportunities in sectors others than agriculture.

Table 2. Employed labour force average annual growth in NENA countries and other developing countries excluding LDCs, 1980-2015 (percent)

	1980-1990	1990-2000	2000-2010	2010-2015
All sectors				
NENA	2.8	3.0	3.2	2.5
Developing economies excluding LDCs	2.8	2.0	1.6	1.4
Agriculture sector				
NENA	0.9	1.1	0.9	-0.9
Developing economies excluding LDCs	2.1	0.7	0.4	0.1
Non agriculture sector				
NENA	4.2	4.0	4.1	3.5
Developing economies excluding LDCs	3.9	3.7	2.8	2.5

Source: UNCTAD, 2017.

10. Finally, the third characteristic, economic growth, has been slower than in other regions, both for the NENA region, as a whole, and for every income category. Overall, growth in NENA countries over the past 35 years has been 1.5 to 2 percent lower in agriculture and industry than in other non-LDC developing countries, while growth in services in the NENA countries has been a full 6 percent less than in other developing countries (Table 3). One reason for low growth is the business and investment climate in NENA countries which ranks lower than in many other developing countries. Two-thirds of NENA economies are in the bottom half of the World Bank Doing Business Index ranking, and only one country (United Arab Emirates) has a business environment comparable to the Organisation for Economic Co-operation and Development (OECD) countries (World Bank, 2017).

Average annual growth of value added, 1980-2015 Agriculture Services Industry Region-wide **NENA** 3.4 1.9 4.0 7.8 Developing countries without LDCs 5.3 6.5 High income **Gulf Cooperation Council countries** 4.3 1.8 4.8 High-income developing countries 8.2 5.6 6.6 Middle income Maghreb 3.7 0.3 3.9 Mashreq 3.2 3.0 3.3 Middle-income developing countries 6.7 6.3 4.8

Table 3. NENA sectoral growth performance in comparative perspective, 1980-2015

Source: UNCTAD, 2017.

B. Structural Unemployment

- 11. Every region has different features of structural transformation, though unemployment, particularly for youth, is often a characteristic of development. For instance, in 2016, though unemployment was highest in North Africa (12 percent), it was also high in Latin America and the Caribbean (8 percent), North, South and Western Europe (9 percent) and in Eastern Europe (6 percent) (ILO, 2017). Youth unemployment was significantly higher than general unemployment in all regions. However, it was highest in North Africa, reaching 30 percent, compared to 19 percent in Latin America and the Caribbean and in North, South and Western Europe, while it was 17 percent in Eastern Europe (ILO, 2017).
- 12. Though unemployment in the process of structural transformation is common, the combination of high population and labour force growth, low economic growth and an industrial sector biased towards capital-intensive extraction industries have combined in the NENA region to produce singularly high structural unemployment rates, particularly for youth. These rates will be a main challenge to the region's economic development as they cannot be solved by cyclical changes in the price of oil or other commodities. The solution to high youth unemployment lies in fundamental policy changes.

C. Internal and international migration and their link to unemployment

13. The mismatch between population and economic growth is not new to the NENA region, and has been a cause of the structural unemployment since the end of World War II. Many young people in the region, facing one of the world's highest unemployment rates, may see migration (internal and international) as their only chance to survive and escape poverty. Data from UNDESA and OECD suggest a decrease in the migration flows within the region, coupled with increased flows to OECD countries. The unprecedented upsurge in migrants from the NENA region in the past few years is however tied also to conflicts in Iraq, Libya, the Sudan, the Syrian Arab Republic and Yemen. Refugees are often less skilled than those who migrated to Europe and to the Gulf countries during the 1960s and 1970s. Thus, whereas formerly NENA migrants filled an employment gap and were thus welcomed in recipient countries, migrants today often have difficulty entering the local labour markets and their outcomes generally lag well behind those of other migrant groups.

IV. The Rural-Urban Gap

14. Structural transformation in the sense of a declining share of agriculture in GDP and the labour force is a side effect of higher economic growth in non-agricultural sectors associated with industrialization. However, structural transformation and its underlying industrialization are alone not

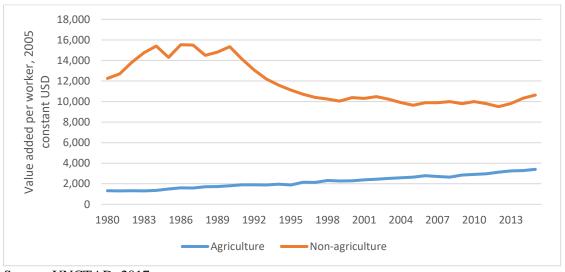
sufficient to bring widespread and inclusive growth to the economy. If not accompanied by policies aimed at inclusive agricultural and rural transformations, structural transformation leads to significant disparities in living standards and poverty between rural and urban areas, underpinned by differences in labour productivity between traditional agriculture and industry and services.

- 15. The rural-urban gap and increasing inequality are a common feature of transformations in all regions of the world. The rural-urban gap has three prominent characteristics:
 - it is closely tied to structural transformation;
 - it is exacerbated by inequalities in infrastructure, public services, transportation and educational opportunities;
 - it leads to poverty and unemployment in both rural and urban areas.

A. A rural-urban gap is inherent in structural transformation

- 16. As highlighted, structural transformation is an ambiguous phenomenon. In one sense, average incomes per capita rise as resources are reallocated to more productive sectors of the economy. In another sense, by itself, structural transformation is not capable of effecting inclusive and widespread development without specific policies aimed at transforming agriculture and rural areas. Instead, it causes a widening rural-urban income gap in productivity and living standards. The productivity gap is visible in the results of structural transformation in the NENA region where in 2015 20 percent of the labour force employed in agriculture produced only 5 percent of GDP.
- 17. More formally, the productivity gap can be illustrated by plotting productivity of labour employed in agriculture and other sectors over time. Figure 4 illustrates the gap between the productivity of labour (value-added per worker per year) in agriculture versus other sectors. In 2015, an average worker in agriculture in the NENA countries produced USD 3 400 worth of products per year, about one third of that produced by an average worker outside of agriculture. The large differences in labour productivity suggest that average wages for those employed in agriculture are likely to be far lower than those of workers outside the sector.

Figure 4. The rural-urban productivity gap: productivity of labour in agriculture vs. other sectors, NENA countries, 1980-2015



Source: UNCTAD, 2017.

18. Partially as a result of lower wages in agriculture, rural areas in the NENA region generally have higher income poverty rates than urban areas. On average, rural poverty is about twice as high as poverty in urban areas (Table 4).

Table 4. Income poverty: Rural and urban poverty headcount evaluated at national poverty line, selected NENA countries

	Rural poverty	Urban poverty	Year
Algeria	4.8	5.8	2011
Egypt	32.3	15.3	2010
Iraq	30.6	14.8	2012
Jordan	16.8	13.9	2010
Mauritania	59.4	20.8	2008
Morocco	14.4	4.8	2007
Syrian Arab Republic	36.9	30.8	2007
the Sudan	57.6	26.5	2009
Yemen	40.1	20.7	2005

Source: World Bank, 2018.

B. The rural-urban gap is exacerbated by deprivation in education, health and living standards

19. The rural-urban income and poverty gap is deepened by differences in access to education, health, and other public services and housing. In most countries, access is between 3 and 20 times lower in rural areas. Indicators of deprivation provide an indication of aspects of poverty that are not captured by estimates of income poverty. Table 5 defines various indicators of deprivation by area, while Tables 6 and 7 present the share of urban and rural residents that meet the definitions of deprivation in Table 5. The sources of all data are country population, health and living standards surveys conducted by country governments.

Table 5. Indicators of deprivation

Deprivation	Indicator	Household members are deprived if
Education	Years of	No household member has completed secondary schooling
	School attendance	Any school-age child is not attending school or is 2 years or more behind the right school grade
Health	Child mortality	Any child less than 60 months has died in the family during the 5-year period preceding the survey
	Nutrition	Any child (0-59 months) is stunted or wasted or any adult is undernourished
Public services and housing	Electricity	Household has no electricity
	Sanitation	Household sanitation is not improved, according to SDG guidelines, or it is improved but shared with other households
	Drinking water	Household does not have piped water into dwelling or yard
	Floor/roof	Floor is earth, sand, dung, rudimentary, cement or roof is not available or made of thatch, palm leaf, sod, rustic mat, palm, bamboo, wood plank, cardboard

Sources: ESCWA, 2017.

Table 6. Share of rural and urban populations deprived of education and health services (percent)

	Education deprivation				Health deprivation			
	Years of schooling		Child school attendance		Child mortality		Nutrition	
	Rural	Urban	Rural	Urban	Rura	Urban	Rura	Urba
Algeria	1.5	0.3	1.5	0.5	1.5	0.5	0.4	0.2
Egypt	2.1	0.9	3.2	1.7	2.6	1.3	1.4	0.7
Iraq	7.7	2.4	17.5	6.3	10.5	5.1	5.9	2.5
Jordan	0.1	0.1	1.2	0.6	1.2	1.5	1.0	1.3
Morocco	25.6	1.9	13.2	1.1	11.8	1.4	2.7	0.3
Syrian Arab Republic	3.1	1.3	4.4	2.5	2.3	1.3	2.2	1.0
the Sudan	31.0	7.8	28.5	7.9	18.4	12.6	29.0	12.5
Tunisia	1.9	0.1	1.6	0.0	1.4	0.1	0.4	0.0
Yemen	17.9	3.3	32.7	11.5	21.5	10.7	41.8	15.4

Source: Alkire and Robles, 2017.

Table 7. Share of rural and urban populations deprived of public services and decent housing (percent)

	Electricity		Improved sanitation		Drinking water		Flooring	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Algeria	0.7	0.1	1.5	0.2	1.2	0.2	0.7	0.1
Egypt	0.1	0.0	0.8	0.0	0.2	0.0	0.9	0.1
Iraq	2.2	0.0	4.2	0.4	7.6	0.3	6.4	0.3
Jordan	0.3	0.0	0.0	0.0	0.5	0.0	0.2	0.0
Morocco	10.3	0.3	17.6	0.4	23.9	0.4	17.8	0.2
Syrian Arab Republic	0.1	0.0	1.5	0.3	1.7	0.3	2.0	0.3
the Sudan	55.3	15.3	57.8	21.4	45.6	16.2	63.3	27.5
Tunisia	0.5	0.0	1.9	0.0	1.6	0.0	0.2	0.0
Yemen	27.3	1.2	47.2	6.1	36.6	7.0	33.3	3.3

Source: Alkire and Robles, 2017.

C. The significance of the rural-urban gap

- 20. The rural-urban gap is to some extent inevitable during the industrialization process as low productivity agriculture is left behind by the faster growing industry and service sectors. However, many countries have narrowed and even eliminated the gap through policies aimed at agricultural development, territorial development and infrastructure investment. The continuation and deepening of the gap is therefore also a result of neglect.
- 21. Part of the reason for neglect may be that policies for agriculture and agroindustry are often thought of in strictly sectoral terms, to the extent that agricultural and rural development are believed to benefit only a sector of diminishing importance in the economy. The GDP lens vastly underestimates the importance of agriculture and rural areas to the economy, because it underrates the extent to which the rural-urban gap subverts structural transformation. Structural transformation as a core feature of development has raised average incomes per capita. However, it has also contributed to poverty and structural unemployment. Lower wages and higher poverty in rural areas stifle economic development there, and are among the complex set of intertwined adverse drivers and structural factors that have led to widespread rural outmigration in search of better living conditions. However, most migrants are unable to find formal jobs in urban areas. They therefore remain unemployed or find employment in the

informal service sector where productivity is also quite low. The rural-urban gap thereby brings about a transfer of poverty from rural to urban areas without contributing much to the development of either.

22. Though the NENA region's distinctive structural transformation may have initiated high unemployment, the rural-urban gap prolongs and deepens it. The failure to address the rural-urban gap with policies is also a direct result of decades of neglect in agricultural and rural development policy, which has been replaced by food security policies directed at encouraging wheat and other staple production. Food security policies based on increased self-sufficiency in staples have discouraged the diversification of agriculture to more high-value products, a key to higher agricultural income and export potential, and to increased employment through labour-intensive food industry development. A policy foundation for diminishing unemployment in the region, therefore, is to address the rural-urban gap in development and livelihoods while, at the same time, adopting innovative ways to create employment opportunities responding to the specific needs and aspirations of rural youth, including by harnessing the development potential of migration for rural areas of origin.

V. Policies for the Elimination of the Rural-Urban Gap: towards inclusive rural transformation and sustainable development

23. The rural-urban gap does not resolve itself. In a review of successful agricultural transformations, Tsakok (2011) found that no country with a significant agricultural sector has bridged the gap without substantial policy actions. These policies can be divided into three groups: policies for agricultural transformation, for rural (or territorial) development and for improving public services in rural areas.

A. Policies for agricultural transformation

- 24. Agricultural transformation refers to the shift from mainly subsistence farming to commercial, diversified production systems. At the farm level, the process includes diversification of the crop mix into higher value crops, as well as into livestock and dairy farming. A more diversified and higher value crop mix requires more technologically sophisticated production and marketing methods. Higher value products require higher investment, improved transportation, higher quality processing and packaging and better agricultural practices, but they also allow for higher incomes. The transformation of agriculture, therefore, has an economic ripple effect throughout rural areas. Government has a crucial role in this process of providing public goods, including infrastructure (roads, railways, terminal markets, storage facilities, etc.), as well as providing agricultural research and extension services and enforcing standards and regulations for food quality, processing and safety. In addition, governments have a critical task of fostering a conducive environment for the engagement of service providers from private sector, producer organizations and civil society to provide a wide range of technical, financial and business services that are needed to support commercialization and market-orientation of small-scale agriculture.
- 25. Policies for agricultural transformation extend far beyond agricultural and agro-industrial policies. In a review of successful and non-successful agricultural transformations, Tsakok (2011) noted five overall conditions that have led to successful agricultural transformation around the world: (1) a stable framework of macroeconomic and political stability with peace; (2) an effective technology-transfer system that ensures that research and extension messages reach the majority of farmers; (3) access to lucrative and expanding markets, so that investing in agriculture is good business; (4) a usufruct rights system that rewards individual initiative; and (5) employment creation in non-agricultural sectors. We can also add (6) government provision of public goods for enabling modern agriculture and food production, such as roads, railways, terminal markets and storage facilities, as well as enforcing standards and regulations for food quality, processing and safety. Reinforcing the role of producer organizations as well as their capacity to provide services and link producers to input and output markets is another dimension that requires policy considerations. The same applies for the brokerage of arrangements that benefit smallholders and adopting improved vehicles for financial inclusion. Contract

farming and outgrower schemes are at the heart of most cluster, agropark and Special Economic Zones (SEZs) initiatives and can be combined with dedicated credit as part of agroterritorial development strategies, to support farmers and agribusiness and counter the lack of insurance and credit availability.

- 26. Education is a central part of technical change in agriculture, for farmers, agroprocessors, as well as for research and extension personnel and other service providers. However, the current agricultural education system in the NENA countries does not adequately prepare students for a career in agribusiness. Reform of agricultural colleges and universities is needed in order to produce graduates committed to agriculture and rural development who are qualified to address present and future challenges. This requires a reform of university governance, teaching concepts, curricula, as well as stronger collaboration with the community and the private sector.
- 27. In addition to education, there is a need to reinvigorate agricultural research and extension. It is also necessary to engage with other service providers, producer and youth organizations as well as migrants and diaspora's associations to include facilitation of village-level small enterprise development, establishment of innovation platforms for agricultural products, livestock, fruits, vegetables, poultry and small ruminants and the development of rural towns as hubs for product markets and agrifood business. Agro-innovation platforms are particularly helpful for women and youth, serving as a tool for increasing employment that will contribute to slowing excessive rural outmigration, particularly of youth. However, they require a reconceptualization of the role of research and extension, and the acknowledgement of the plurality of actors and service providers engaged in the development of the rural economy.
- 28. Experiences of other countries illustrate that agricultural transformation through technical change can generate growth, product diversification and a reduction in rural poverty. Policy reforms in Brazil and Chile in the 1970s and 1980s focused on improving incentives in agriculture through land reform, elimination of state controlled monopolies for crop procurement, and opening agriculture to trade. These were fundamental contributors to increases in rural incomes and the reduction of rural poverty (FAO, 2017). In Chile, growth of production of diversified crops on small farms, such as fruits, vegetables and wine, significantly contributed to poverty reduction and rural employment in the central regions, leading to lower rates of rural-urban migration. Valdes and Jara (2008) note that these developments were largely a consequence of the labour-intensity of horticultural production and exports, which employ more labour per ton than import substitution crops like wheat and sugar. Between 1987 and 2000, the national poverty rate fell from 45 to 20 percent and the rural poverty rate fell from over 50 to 23 percent (Valdes and Jara, 2008).
- 29. China began its economic reforms in 1978 in agriculture, and has seen unprecedented reductions in poverty. Agricultural reforms established robust incentives for small-farm production as a pathway out of poverty through instituting strong land user rights, partial price liberalization and increases in government procurement prices. These reforms led rural incomes to rise by 15 percent per year between 1978 and 1984, and rural poverty to decline from 76 percent in 1980 to 20 percent in 1985 and 12 percent in 2001 (World Bank, 2007). From agriculture, the reforms spread to rural industry, trade and urban areas, causing national poverty rates to fall from 53 percent in 1981 to 8 percent in 2001.

B. Policies for rural (or territorial) development

30. Agriculture relies on forward and backward linkages with other sectors to reach growing markets in urban areas. Therefore, efforts aimed at the elimination of the rural-urban gap cannot focus exclusively on technical change in agriculture, but must leverage agricultural transformation to develop agribusiness and agroindustry along the value chain from input suppliers to downstream processing, packaging, transport and retailing. This is all the more important because NENA industry is currently far less labour-intensive than in other regions, offering fewer job opportunities (Figure 3). A focus on agriculture and agroindustry transformation is a labour-intensive growth strategy, as well as a pro-poor growth strategy, since poverty is predominantly rural in the NENA region (Table 4). As part of a strategy to improve livelihood opportunities in rural areas, a territorial approach would strengthen rural links

with small cities and rural towns in order to connect producers, agro-industrial processors and ancillary non-agricultural services, as well as other downstream segments of food value chains, making also the best use of the new rural-urban linkages emerging from migration dynamics.

In the NENA region, food processing enterprises are often small, with low productivity operations that are inhibited by their reliance on an unpredictable supply of products from low productivity farms (Breisinger, et al., 2017). Policies to support agriculture, as well as connections between agriculture and agroprocessing, are critical for the development of non-agricultural jobs in rural areas. This requires infrastructure and services, but also planning and consultation with local government and business. It requires a wide range of technical, financial and business support services, engaging service providers from various sectors and strengthening of collective action and producer organizations in rural areas. Governments in Latin America have recognized the need for rural territorial development to alleviate rural poverty and rural-urban disparities in living standards. Rural territorial development planning in Mexico focuses on inducing endogenous development through the creation of "micropoles of development," and the National Plan for Rural Development in Brazil is designed to improve market access and promote diversification for small farmers (FAO, 2017). Examples of agroterritorial development tools include agrocorridors and agroclusters, but the fundamental purpose of these tools is the development of multistakeholder consultative planning with the participation of local, regional and national governments, as well as private business and communities. The goal of such planning is improving rural-urban connectivity and creating rural employment (FAO, 2017).

C. Policies for improvements in public services in rural areas

- 32. The longstanding policy focus on urban areas and industry has led to a neglect of basic rural infrastructure, beginning with deprivations in education and health, as well as the provision of public services such as electricity, drinking water and sanitation (Tables 6 and 7). The gap in education, health and public services deprives rural inhabitants of the opportunities available to urban residents. Substandard education, health and public services severely constrain development in rural areas, discouraging private investment, thus impeding the closing of the rural-urban income and employment gap.
- 33. Rural development begins at the community level, involving building social and physical infrastructure, as well as financial services. Central government investment in roads, electricity, sanitation and water facilities and other basic infrastructure can assist in the rural development process by providing the public goods necessary for attracting investment. Policies should also aim to improve access to professional remittance services in rural areas, with lower transaction costs and a faster service. This should be accompanied by financial inclusion and literacy for migrants and their families and in particular young migrants, to help them increase savings and invest in agriculture and sustainable livelihoods strategies. Any intervention should include a combination of general measures to improve the overall investment climate and ad hoc finance facilities for agriculture-related activities carried out by migrant families and diaspora (e.g. remittance-linked loans and diaspora bonds) or returnees. For these particular populations, it is also key to capacitate them with "mobile" skills, which they can reproduce in their countries of origin. Furthermore, market research needs to be carried out to identify delivery systems most suited to the needs of rural areas; for example, mobile money transfers could be an attractive option for remote rural areas where cell phones are widespread among remittance recipients. Collaboration agreements could be established with service providers to develop financial services at affordable prices in rural areas (FAO, 2016). The participation of the community, government, civil society and the private sector in jointly identifying and funding packages of development projects is crucial. Such collaboration builds social and physical capital, both of which are attractive to private investors and should have economic multiplier effects in the long run.

VI. Conclusions

34. Unemployment in the NENA region stems in part from the rural-urban gap and the specific trajectory of agriculture transformation. Solving the employment and singularly the youth employment

problem requires a set of coherent policies that spans across many sectors, from agriculture, to rural development, population, education, infrastructure, food security and trade, as well as migration, environment and climate change.

- 35. Policies for the elimination of the rural-urban gap and for optimizing the agriculture transformation potential provide a basis for an inclusive rural development agenda that has long been eclipsed by food policies that have favoured staple crops without taking into consideration the broader agriculture value chain benefits and territorial development context.
- 36. Governments in the region can greatly benefit from prioritizing evidence-based agricultural transformation strategies and territorial development policies aimed at closing the rural-urban gap. Such policies and strategies can greatly contribute to the reduction of both rural and urban poverty and to youth employment, and more broadly to the achievement of the Sustainable Development Goals.

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