

# Investing in rural youth in the Asia and the Pacific region

by  
Roehlano Briones

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## Abstract

This paper characterizes the structural and rural transformation of the Asia and the Pacific region (APR), highlighting the implications for rural youth opportunities and challenges, and identifying and elaborating on the characteristics, opportunities and challenges related to rural youth inclusion. Nearly half of the population in Asia is urban, with the proportion projected to rise to 59 per cent by 2035. Except for China, the majority of youth still reside in rural areas. Youth labour force participation is higher in rural than urban areas, and for males than females. Rural youth in countries with low structural transformation and low rural transformation continue to rely on agriculture for employment; in countries with high levels of transformation, a majority of rural youth are now employed outside agriculture (though it is still the biggest contributor to rural youth employment). About one fifth of youth in Asia are not in education, employment or training. More than 86 per cent of employed youth in Asia and the Pacific are in the informal sector, greater than the proportion of informal employment among adult workers.

The full potential for structural transformation in APR may fail to be realized because of barriers facing rural youth in terms of migration, achieving full human development, gaining access to land, farm technology, financial services, and other enterprise support. Promising areas for investing in the future of rural youth are the following.

**Access to land:** there is some quantitative evidence showing the benefits of freehold titling programmes, which suggests opportunities for improving tenure for rural youth and especially women already cultivating land.

**Education and human development:** investments in school facilities in villages have been found to improve enrolment and learning outcomes. The farmer field school approach is also effective. Information and communication technology (ICT) can promote agricultural extension, which appears to augur well for youth, who appear to be pioneer adopters of ICT in rural villages. Expansion of vocational education is beneficial especially where its incidence is low. In Asia, linkage with future employment is the single most important factor in training success. Sexual and reproductive health education, counselling and contraceptive availability are effective in increasing adolescent knowledge related to sexual health, contraceptive use and decreasing adolescent pregnancy.

**Access to finance and enterprise support:** social funds/microcredit operations are effective financial instruments that can be easily inserted in community demand-driven interventions for rapid job creation with extended outreach. Enterprise support should not rely on credit alone but should also provide a wider range of business development services.

## 1. Introduction

Transformation of the rural economy determines the pace and direction of rural development, and is itself driven by wider economic transformation (IFAD, 2016). Integral to rural transformation is the increasing remuneration of labour, as the wider economy undergoes structural change, and agricultural productivity rises. The degree to which rural wage growth can be sustained is highly dependent on whether or not rural youth of today are able to meaningfully engage in the transformation process. Inadequate human capital investment and high unemployment rates among youth are among the greatest challenges facing many countries today (UN DESA, 2015). Unfortunately, missed opportunities to invest in and prepare the current generation of young people will be extremely costly to reverse, owing to the cumulative nature of human development (World Bank, 2007).

Even though youth comprise less than a fifth of the total population in APR, youth in APR account for over 60 per cent of the world's youth (United Nations, 2013). APR therefore plays a key role in the human development of today's youth; moreover, the region's long-term development in agriculture, food production and rural economy still depends crucially on today's youth outcomes.

This background paper on rural youth in APR seeks to provide an overview of the situation of rural youth in each specific region and corresponding subregions, in relation to an overall framing narrative of structural and rural transformation. The discussion will cover, among other things:

- the main challenges and opportunities of rural youth participation in agriculture and the rural economy;
- existing policy and programmatic approaches focused on rural youth;
- main areas of investment to foster rural youth inclusion in rural transformation;
- relevant subregional differences in terms of challenges and programme approaches;
- empirical evidence to support a regional/subregional approach to investing in rural youth.

## 2. Analytical framework

### 2.1 Basic framework

#### **Structural transformation**

The following presents a narrative of structural transformation as a framing device in viewing the future prospects of rural youth in APR. Structural transformation, at its most basic level, involves movement of labour and capital away from agriculture towards industry and services, as per capita income or overall productivity per worker increases. The conventional explanation of this change adopts a neoclassical framework, tracing structural change to both demand-side and supply-side factors. On the demand side is the Engel relation, i.e. declining proportion of food in household expenditure as household income increases, combined with high transaction costs of importing food. On the supply side are factor proportion effects, i.e. when factors of production increase, relative output change is biased towards the industry which is more intensive in the factor whose relative endowment has increased. Hence, with capital accumulation, resources move towards the more capital-intensive activities, away from labour- and land-intensive activities, namely agriculture. Under this framework, resources are efficiently allocated; structural transformation is a by-product of underlying economic forces; and the role of policy in transformation is minimal.

## Dual development and agglomeration economies

In contrast to the neoclassical framework, we adopt elements of the classical model of dual development (Lewis, 1954). At the leading edge of development is a modern sector which is accurately described by the neoclassical framework: labour is efficiently utilized, wage workers are paid their marginal products, and there is a capitalist class that mobilizes savings into investment. Lagging behind is a traditional sector where labour supply is abundant, a sizeable proportion of workers is self-employed and wages are pegged to some average norm rather than to marginal product (which is close to zero). Wages in the modern sector may be high enough to induce migration from the traditional sector, but wages remain fairly stable in the economy as a whole until the pool of surplus labour is exhausted.

Structural transformation can be understood in terms of the dual development model by relating the traditional sector to agriculture, and the modern sector to industry and services. The movement of labour from agriculture to non-agricultural activities is associated with a rise in average labour productivity in the traditional sector; with capital accumulation in the modern sector, labour productivity rises there as well. The dual development model allows for long-term misallocation of labour; and predicts a regime switch from flat to rapid wage growth when the misallocation is largely eliminated.

The second element we introduce is that of agglomeration economies, which adds a geographic dimension to the structural change (World Bank, 2009). Agglomeration economies are endemic to many industrial and services clusters, but absent in agriculture. This further drives expansion of industry and services in urban agglomerations. With increasing concentration of economic activity comes a deepening division between living standards and economic specialization between urban centres and the rural periphery.

## 2.2 Extensions

### Human capital and social institutions

To the foregoing we add elements that can accelerate or impede the pace of structural transformation. A critical factor is human capital investment; in rural households, this opens up wider employment opportunities for young workers and facilitates long-term migration (Masson, 2001). Conversely, failure to invest in human capital may stymie the process of structural transformation, as young workers lacking cognitive and non-cognitive skills remain trapped in menial, low-paying jobs in agriculture.

Other key factors affecting human capital investment and mobility are not strictly economic, but may be determined by social institutions. Property relations and inheritance norms may exclude young people from control and access over productive assets, including land. When they do gain access by inheritance, this may entail further fragmentation of family farms in countries where the population continues to grow even as the agricultural land frontier has closed.

Another key social institution is differential treatment of males and females. The existence of a gender pay gap has been widely observed in both developing and developed countries. Female workers were paid about 83 per cent as much as male workers in developing countries during the period 2005-2010; the disparity is even larger in developed countries, at 75 per cent (Terada-Hagiwara et al., 2018.) The gap is traceable in part to gender discrimination (posited by Becker, 1971), and perhaps also to lower rates of female labour force participation and engagement in full-time work compared with men, in turn due to the tendency for women to specialize in home work and child rearing (Mincer and Polacheck, 1974).

## Additional categories

The preceding sketch is an intentional caricature. The agricultural and rural economy is not in fact bereft of modern, capitalist-type enterprises. Nor are unproductive, traditional-type activities entirely absent in industry and services. Hence, for instance, workers who manage to migrate despite having insufficient skills may end up either unemployed or in the low-paying services economy of cities and towns (e.g. Harris and Todaro, 1970).

On the other hand, rising investments, productivity and wage employment in rural areas, led by the peri-urban zone, can limit and even reverse the divide between urban and rural households, and between those dependent on agriculture and those that are not. The expansion of a modern sector within agriculture leads to agricultural productivity growth, which in turn facilitates (rather than opposes) the “pull” of the modern sector (Ranis and Fei, 1961).

Likewise, IFAD (2016) highlights the interplay between the trajectories of structural transformation and of rural transformation. As the proportion of farming in the economy declines, the range of opportunities for rural employment expands. Initially, self-employment on the farm shifts to self-employment off the farm, dominated by informal household enterprises; as incomes continue to rise, self-employment shifts to wage employment as private sector enterprises become dominant.

IFAD (2016) advances the framework further by recognizing the complexity of the structural and rural transformation mix. Economies may fall between the extremes of slow structural transformation and slow rural transformation (Low-Low) and rapid transformation in both the structural and rural dimensions (High-High). Alternatively, some economies have undergone slow structural transformation but rapid rural transformation (Low-High); others, rapid structural transformation and slow rural transformation (High-Low).

APR is a region with a large representation of both High-High countries (in East and Southeast Asia) and Low-Low countries (in South and West Asia). The largest group of countries are High-Low (in both South and Southeast Asia), with one Low-High (Pakistan, in South Asia).

**Table 1.** Categorization of APR countries by degree of structural and rural transformation

		Rural transformation	
		High	Low
Structural transformation	High	China, Indonesia, Philippines, Thailand	Bangladesh, Bhutan, India, Lao People's Democratic Republic, Sri Lanka, Viet Nam
	Low	Pakistan	Afghanistan, Cambodia, Myanmar, Nepal

IFAD (2016) suggests that the more transformed economies (High-High) will tend to have higher incomes and lower proportions of youth in the population, and be more highly urbanized. Institutions tend to be stronger and fiscal resources per capita higher. The reverse holds for the least transformed economies (Low-Low).

The types of investment needed by an economy are related to degree of both structural and rural transformation. An economy at a nascent stage of structural transformation will still need to mobilize massive amounts of surplus labour in traditional activities; the problem is even worse if levels of rural transformation are also low. These economies will require significant basic investments in human capital and development, as well as addressing barriers to youth access to assets and mobility; unfortunately, state facilitation of such investments will have to be done under stringent fiscal constraints.

Meanwhile economies that have undergone a fairly advanced level of structural transformation with low levels of rural transformation will need investments and policy reforms aimed at raising agricultural productivity (e.g. farm mechanization and adoption of other agricultural technologies). Lastly, developing economies that have progressed in terms of both structure and agricultural productivity will now have resources to ensure higher levels and quality of human capital and other investments to accelerate the transition from low-paying jobs to better-remunerated ones, in both rural and urban areas. Without neglecting remaining institutional barriers to youth and women, such economies can focus on addressing issues such as skills mismatches in the labour market and the growth of enterprises that tend to employ rural youth, especially micro-, small and medium-sized enterprises (MSMEs).

### **2.3 Substantiating the narrative**

Fields (2011) offers a stylized comparison between labour markets of developing and developed countries. The tendency in the former is that:

- the proportion of agricultural employment is higher
- the proportion of self-employment, own-account work and unpaid family work is higher
- for full-time employment, pay is lower and working hours longer
- underemployment rates are higher
- reservation wages are lower, and willingness to accept casual work is greater, hence unemployment rates are actually lower

A regime switch is associated with a Lewis turning point in rural wages, which is either completed or under way in East Asia (Briones and Felipe, 2013). Meanwhile, on the issue of labour misallocation, a study has found that labour productivity in agriculture is far lower than in non-agricultural sectors, and that the productivity gap is wider for poorer countries (Restuccia et al., 2008). To account for the productivity gap, that study posits higher barriers to the adoption of technological innovations in agriculture than in non-agricultural sectors.

Young (2013) looks at differences not in sectoral productivity, but in urban and rural earnings. He confirms the presence of an urban-rural earnings gap and attributes 40 per cent of mean country inequality and much of its cross-country variation to the earnings gap. The gap induces massive migration: one out of every four or five individuals raised in rural areas move to urban areas as young adults, where they earn much higher incomes than rural permanent residents. The pay gap is therefore directly traceable to differences in human capital and skill.

In contrast, Gollin et al. (2014) find that only one third of differences in agricultural productivity can be attributed to differences in working hours and education of workers. Likewise, Artz et al. (2016) find an unexplained urban-rural wage gap; hypothetically, eliminating this gap will raise per capita GDP on average by 13.9 per cent.

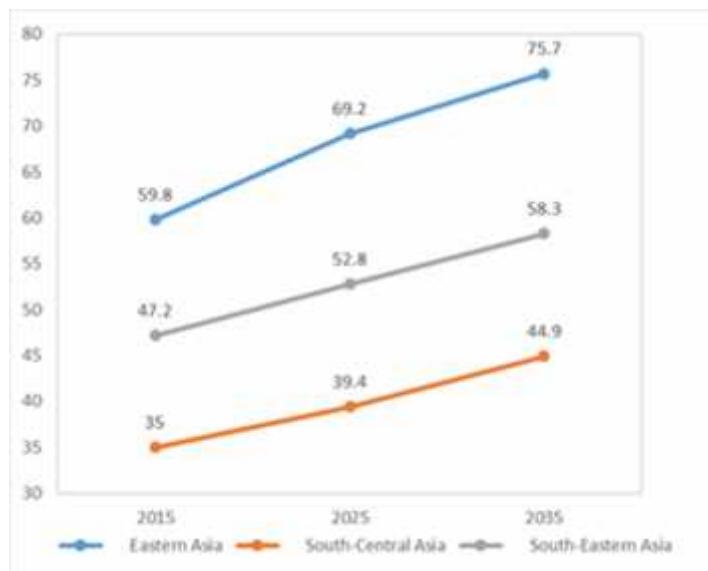
The issue of sectoral productivity differences has been revisited by Imai et al. (forthcoming) for a panel of Asian countries. Convergence of agricultural and non-agricultural productivities is strongly rejected, based on analysis of panel data of Asian countries. They examine interaction of labour productivity by sector, and find that agricultural labour productivity growth is associated with future non-agricultural productivity growth. This serves as a partial explanation of persistent divergence in productivity. Lastly, they confirm that the labour productivity gap is linked with the reduction in both urban and rural poverty, income inequality and the proportion of urban population in the total.

### 3. Characterizing rural youth in Asia and the Pacific

#### 3.1 Demographics

Urbanization has progressed considerably in Asia, as close to half of the population already resides in urban areas (Figure 1). Rural populations are expected to become a minority (49 per cent) by 2025, receding further to 41 per cent by 2035.

**Figure 1.** Percentage of urban population in total, Asia, 2015-2035



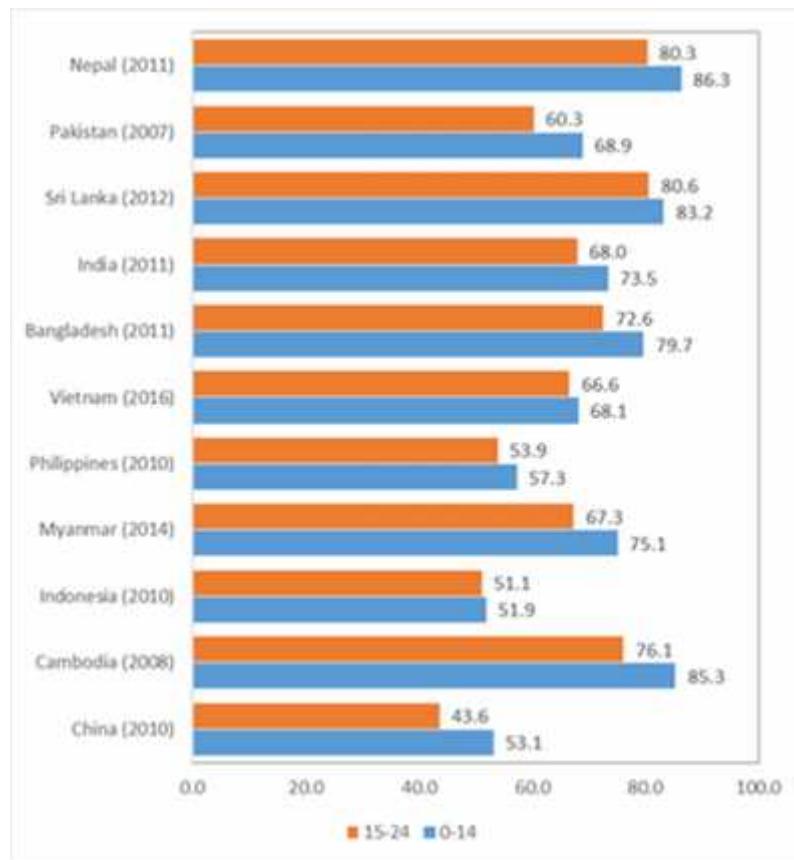
Source: UNStats

Urbanization is led by East Asia; the Republic of Korea and Japan had already reached 80-90 per cent urbanization as of 2015. The next most highly urbanized subregion is Southeast Asia, whereas the least urbanized subregion is South Asia. In the latter, the majority of the population will remain rural even by 2035.

For most of the APR countries for which data are available, a majority of youth (aged 15-24) continue to reside in rural areas (Figure 2). To see this, consider the orange bars: nearly all reach above 50 per cent, with China being the only country in which rural youth are a minority in that age group. The lowest proportions of rural areas in youth population are in High-High countries, i.e. Indonesia, Philippines, and China. High-Low countries, as well as Low-High countries, tend to have larger rural population proportions among youth. The highest rural proportions are found in Nepal (a Low-Low country) and Sri Lanka (a High-Low country).

Figure 2 also presents the rural proportion in the age range 0-14. The rural proportion for this age group tends to be even higher than in the 15-24 group. This suggests that a preponderance of a nation's children up to age 14 tend to be raised in rural areas; but, from age 15 and above, youth tend to migrate to urban areas. The size of the shift appears to be unrelated to the level of agricultural or rural transformation: the biggest differences are found in China (High-High), Cambodia (Low-Low) and Pakistan (Low-High); the smallest differences are in Indonesia and Viet Nam (High-High), followed by Sri Lanka (High-Low).

**Figure 1.** Proportion of youth population (aged 15-24) residing in rural areas, selected APR countries (%)  
(source: UNStats)



Source: UNStats

Note: High-High countries are China, Indonesia, Philippines, Thailand; High-Low countries are Bangladesh, Bhutan, India, Lao People's Democratic Republic, Sri Lanka, Viet Nam; the Low-High country is Pakistan; Low-Low countries are Cambodia, Myanmar, Nepal.

Source: UNStats. Accessed 10 August 2018.

### 3.2 Employment

#### Labour force participation

The labour force participation rate (LFPR) tends to be much lower among youth than among adults, which is understandable, as the former are still heavily engaged in schooling. However, LFPR among rural youth tends to be higher than LFPR among urban youth (Table 2). This is consistent with lower schooling attainment among the former, perhaps owing to lower access to schooling, greater need to earn wages or both. The discrepancy in LFPR is most extreme among the Low-Low countries; as a group, the High-High countries tend to have more equal rates of LFPR among youth. The rural-urban differential in LFPR among youth diverges widely among the High-Low/Low-High countries, with the least divergence in India and the greatest in Bangladesh.

**Table 1.** Labour force participation rate of youth (aged 15-24), by area, selected APR countries (%)

Source: ILOStat

Countries	Rural	Urban
<b>High-High</b>		
Indonesia (2017)	48.6	46.0
Philippines (2017)	44.8	38.1
Thailand (2016)	43.5	39.1
<b>High-Low/Low-High</b>		
Bangladesh (2017)	61.3	36.9
Bhutan (2015)	32.1	24.2
India (2012)	33.9	29.6
Lao People's Democratic Republic	26.7	32.8
Viet Nam (2017)	61.7	46.3
Pakistan (2016)	45.9	32.1
<b>Low-Low</b>		
Afghanistan (2008)	61.3	36.9
Cambodia (2012)	65.1	49.9
Myanmar (2017)	53.8	43.8

Gender disparities in LFPR by area are shown in Table 3. Female youth in Asia tend to have lower LFPR than male youth. The discrepancy is wider in rural areas than in urban areas. LFPR differences in rural areas of High-High countries are among the highest.

**Table 2.** Male-female LFPR gap of youth (aged 15-24), selected APR countries, in percentage points

Countries	Rural	Urban
<b>High-High</b>		
Indonesia (2017)	24.7	11.8
Philippines (2017)	27.5	8.9
Thailand (2016)	18.6	8.7
<b>High-Low/Low-High</b>		
Bangladesh (2017)	30.1	25.3
Bhutan (2015)	-3.9	-2.3
India (2012)	34.9	31.6
Lao People's Democratic Republic (2017)	2.8	0.7
Viet Nam (2017)	8.3	3.6
Pakistan (2016)	45.2	46.3
<b>Low-Low</b>		
Afghanistan (2008)	32.6	43.3
Cambodia (2012)	2.0	-7.4
Myanmar (2017)	17.1	8.1

Source: ILOStat

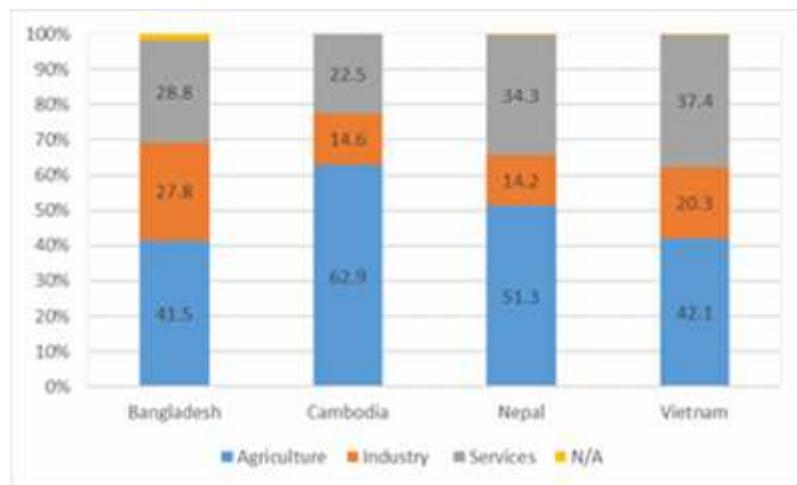
### Employment by sector

Microdata on rural youth livelihoods in Asia are sparse. Survey data from the ILO are available for four Asian countries (Elder et al., 2015): Bangladesh (High-Low), Cambodia (Low-Low), Nepal (Low-Low) and Viet Nam (High-Low). However, the definition of youth in the survey goes from 15 up to 29 years of age (rather than the standard 15-24).

Data on proportions of rural youth employed in agriculture are shown in Figure 3. Agriculture is the biggest employer in all the countries. However, agricultural employment accounts for over half of employment only for Low-Low countries; even in High-Low countries diversification has progressed far, with agriculture being only a minority employer. The second-largest employer in all countries is

services; the proportion of industry is sizeable in the High-Low countries, but not in the Low-Low countries. These patterns appear compatible with the finding of IFAD (2016), which accounts for different categories of rural households; agriculture is the source of most youth employment only for subsistence farming, specialized farming and middle-ground households. On average, for the sample of 25 developing countries in Elder et al. (2105) from various regional groupings (APR; Eastern Europe and Central Asia; Latin America and the Caribbean; the Middle East and North Africa; and sub-Saharan Africa), services come out as the biggest employer, at 67 per cent; industry is second, at 23 per cent; and agriculture is third, at 10 per cent.

**Figure 3.** Proportions of rural youth (aged 15-29) in employment by sector, selected APR countries, 2013 (%)



Source: Elder et al., 2015

### Unemployment

Youth unemployment by area is shown in Table 4. The unemployment rate among rural youth is lower than among urban youth, with the exception of Lao People's Democratic Republic (PDR). That is, rural youth have lower reservation wages and are less willing to wait for better job opportunities, which is consistent with higher levels of wealth and additional alternative household income sources in urban areas. The rural-urban discrepancy is lowest for Low-Low countries, where rates of unemployment are relatively close to zero for both rural and urban youth. However, in some High-Low and High-High countries, e.g. Indonesia, the Philippines, Viet Nam, India and Pakistan, urban youth unemployment is high, relative to that of other countries and to their rural counterparts.

**Table 3.** Unemployment rate among youth (aged 15-24), by area, selected APR countries (%)

Countries	Rural	Urban
<b>High-High</b>		
Indonesia (2017)	12.7	18.0
Philippines (2017)	5.6	9.8
Thailand (2016)	3.4	4.2
<b>High-Low/Low-High</b>		
Lao PDR (2017)	17.2	12.3
Viet Nam (2017)	5.7	11.6
Bangladesh (2017)	12.4	13.6
India (2012)	8.6	13.9
Pakistan (2016)	5.4	9.6
<b>Low-Low</b>		
Cambodia (2012)	1.4	2.4
Myanmar (2017)	3.2	6.5
Afghanistan (2008)	3.0	8.9
Nepal (2008)	1.2	9.5

Source: ILOStat

The female-male unemployment rate gap tends to be narrow in absolute terms, for both rural and urban areas (Table 5). The exceptions are the female-male unemployment rate gaps in urban areas of India, Pakistan, and Afghanistan, which are High-Low, Low-High and Low-Low countries. That is, the female-male unemployment gap tends to be **narrower** for rural than urban areas, which suggests that reservation wages, already low for both sexes, are therefore more similar than reservation wages in urban areas.

**Table 4.** Female-male youth unemployment rate gap, by area, selected APR countries, in percentage points

Countries	Rural	Urban
<b>High-High</b>		
Indonesia (2017)	2.3	-2.4
Philippines (2017)	3.4	0.1
Thailand (2016)	2.6	0.2
<b>High-Low/Low-High</b>		
Lao PDR (2017)	2.9	1.8
Viet Nam (2017)	-0.2	-0.1
Bangladesh (2017)	2.8	0.6
India (2012)	0.8	7.6
Pakistan (2016)	2.0	13.8
<b>Low-Low</b>		
Cambodia (2012)	-0.2	-1.8
Myanmar (2017)	1.0	2.3
Afghanistan (2008)	-0.2	5.0
Nepal (2008)	-1.1	0.1

Source: ILOStat

## Other indicators

Unfortunately, other stylized facts about the urban and rural labour markets in APR cannot be conveniently broken down between youth and adult workers; in lieu of detailed analysis, we present some summary points as follows.

**Underemployment:** data from the Philippines (World Bank, 2016) suggest that underemployment rates are nearly identical for both youth and adult workers (about 20 per cent). The underemployment rate in urban areas (24.5 per cent) exceeds that in rural areas (16.0 per cent). If true in general, this pattern explains why youth are incentivized to migrate (FAO, 2017).

**Informality:** more than 86 per cent of employed youth in Asia and the Pacific are in the informal sector, compared with 67.1 per cent of adult workers. The difference is due to the preponderance of youth and adult workers in rural areas (85 per cent of total), where employment is primarily informal (ILO, 2018).

**Migration:** the movement of workers across sectors, often accompanied by physical migration, is central to the narrative of transformation. Rural youth are typically stereotyped as eager to migrate, especially away from agricultural work. In Lao PDR, focus groups of rural youth cited lack of employment, lack of access to land and low income, as reasons for migrating (Neilsen and Chanhsomphou, 2006). Such intention to migrate may in fact involve a complex set of motivations, which consider numerous factors, such as the transaction cost of migrating. In a set of interviews conducted by Manalo and Van de Fliert (2013), Filipino youth confirmed a desire to migrate; yet, simultaneously, many expressed a strong connection to the family farm. Seasonal or temporary migration was seen as a superior way to achieve livelihood objectives, compared with permanent migration. In the long run, many were planning to earn money in the cities, and then reinvest later in life in the family farm and employ poor relatives.

Seasonality of migration is closely associated with seasonality in availability of work. In Bangladesh, during the lean season of grain-producing areas (between planting and harvest), grain prices tend to rise even as work opportunities turn scarce. While seasonal migration may offer an opportunity to smooth consumption between seasons, in fact the cost of doing so may be prohibitive. Randomized experiments show that providing small transportation grants to seasonal migrants causes a large increase in probability of migrating, as well as in the probability that incomes will be smoothed for seasonal migrants. Destinations tended to be in and around major cities for non-agricultural work, though some engaged in agricultural work in potato-growing areas (Bryan et al., 2014).

## Health and education

Differences in labour market outcomes between urban and rural areas depend on the level of human development, associated with health and education outcomes. Low-Low countries are most disadvantaged in terms of health indicators, most notably for infant mortality (Table 6). However, the High-High countries do not necessarily outperform some of the High-Low/Low-High countries, in terms of infant mortality or underweight prevalence.

**Table 5.** Health indicators, by area, selected APR countries, most recent years available

Countries	Childbearing among girls aged 15-19 (%)		Infant mortality rate (per 1,000 live births)		Underweight prevalence < 5 years (%)	
	Urban	Rural	Urban	Rural	Urban	Rural
<b>High-High</b>						
Indonesia	6	13	26	41	17	23
Philippines	10	11	19	28	16	24
Thailand	10	12			7	10
<b>High-Low /Low-High</b>						
Bangladesh	44	52	26	35	26	35
Bhutan	31	54	10	14	10	14
India	9	14	27	44	33	46
Sri Lanka	6	6	10	19	18	27
Viet Nam	4	9	13	14	7	15
Pakistan	6	9	63	84	24	33
<b>Low-Low</b>						
Cambodia	6	13	22	64	15	25
Lao PDR	9	21	39	85	16	29
Myanmar	..	..	25	43	19	24
Timor-Leste	4	8	22	33	1	3
Afghanistan	63	76	..	..	..	..
Nepal	9	18	38	55	17	30

Source: Population Reference Bureau (2015)

The figures in Table 6 reveal a consistent disadvantage facing rural areas; the disparity appears to be unrelated to the classification of countries in terms of structural and rural transformation. Higher rates of infant mortality in rural areas suggest differential access to high-quality pre-natal care, child-birthing services and postnatal care. Such differences may be due to the lower purchasing power of rural households, along with supply factors (i.e. high per person cost of extending facilities and professionals to remote villages). The exception is Viet Nam, where infant mortality rates in urban and rural areas are both low and virtually identical.

Prevalence of underweight among children under 5 also tends to be higher in rural areas; this is of enormous concern for youth, as cumulative effects of chronic undernutrition are irreversible beyond the age of 5. Also an issue for youth, especially for young women, is childbearing: rates of teenage childbearing are very high, particularly in some South Asian countries (Afghanistan, Bangladesh, Bhutan), which probably reflects the greater sway of traditional values favouring early marriage in rural areas.

### Literacy rates

In the area of education, the High-High countries tend to show the most favourable indicators (Table 7). The literacy rate in these countries is close to 100 per cent; among the low rural transformation countries, only Sri Lanka approaches this level. Among the High-Low countries, Viet Nam and Bangladesh achieve literacy above 90 per cent. The lowest rates of literacy are found among a couple of High-Low/Low-High countries, namely Lao PDR and Pakistan; the other Low-Low countries also perform poorly.

**Table 6.** Literacy rate indicators of youth (aged 15-24), selected APR countries

Countries	Literacy rate (%)	Male-female literacy rate gap (percentage points)
<b>High-High</b>		
China (2010)	99.6	0.1
Indonesia (2016)	99.7	0.0
Philippines (2013)	98.1	-1.4
Thailand (2015)	98.1	-0.3
<b>High-Low/Low-High</b>		
Lao PDR (2011)	72.1	10.2
Viet Nam (2009)	97.1	0.6
Bangladesh (2016)	92.2	-2.6
India (2011)	86.1	8.2
Sri Lanka (2010)	98.2	-0.9
Pakistan (2014)	72.8	14.2
<b>Low-Low</b>		
Cambodia (2009)	87.1	2.5
Myanmar (2016)	84.8	0.7

Source: World Bank World Development Indicators

Male youth literacy rates are higher than female youth literacy rates for a majority of countries; the reverse holds for the Philippines, Thailand, Bangladesh and Sri Lanka. However, in some High-Low/Low High countries, the male-female literacy gap is very large, i.e. Lao PDR, India and Pakistan. Aside from purely economic explanations, these differences are also likely to be influenced by social factors biasing household investment in favour of basic education of male children.

Another common education indicator for youth is the lower secondary completion rate (Table 8). This is computed as the number of new entrants in the last grade of lower secondary education (regardless of age) divided by the population at the entrance age for the last grade of lower secondary education. High-High countries tend to have higher completion rates, led by China at beyond 100 per cent, followed by Indonesia at near 100 per cent. Low-Low countries have the lowest completion rates, with Cambodia being well under 50 per cent. Completion rates in High-Low/Low-High countries are mixed, with that of Viet Nam exceeding those of the Philippines and Thailand, while Pakistan's is barely above 50 per cent. Unlike literacy rates, in most countries females achieve higher completion rates than males. The exceptions once more are in Lao PDR and Pakistan but, interestingly, not in India.

### Not in employment, education or training

A related measure is youth not in employment, education, or training (NEET). Ideally NEET is very low or zero. A simple average places youth NEET rates at about 20 per cent, though, as with LFPR and unemployment figures, youth NEET rates vary widely across countries (Table 9).

**Table 7.** Lower secondary completion indicators, selected APR countries

Countries	Lower secondary completion rate (%)	Female-male lower secondary completion rate gap (percentage points)
<b>High-High</b>		
China (2013)	102.2	2.4
Indonesia (2016)	95.1	2.9
Philippines (2015)	83.2	10.1
Thailand (2015)	78.7	1.8
<b>High-Low/Low-High</b>		
Lao PDR (2016)	66.8	-4.3
Viet Nam (2016)	87.6	4.7
Bangladesh (2016)	76.5	14.7
India (2016)	85.9	5.3
Pakistan (2016)	54.0	-9.6
<b>Low-Low</b>		
Cambodia (2016)	47.4	2.4
Myanmar (2014)	49.9	3.3

Source: World Bank World Development Indicators

**Table 8.** NEET measures, youth (aged 15-24), selected APR countries

Countries	NEET (%)	Female-male NEET rate gap (percentage points)
<b>High-High</b>		
Indonesia (2017)	21.5	12.7
Philippines (2017)	21.7	13.2
Thailand (2016)	15.0	8.8
<b>High-Low/Low-High</b>		
Lao PDR (2017)	42.1	5.8
Viet Nam (2016)	0.6	0.0
Bangladesh (2017)	27.4	34.8
India (2012)	27.5	41.3
Sri Lanka (2014)	27.7	19.8
Pakistan (2015)	30.4	46.2
<b>Low-Low</b>		
Cambodia (2012)	7.8	5.4
Myanmar (2017)	17.4	13.0

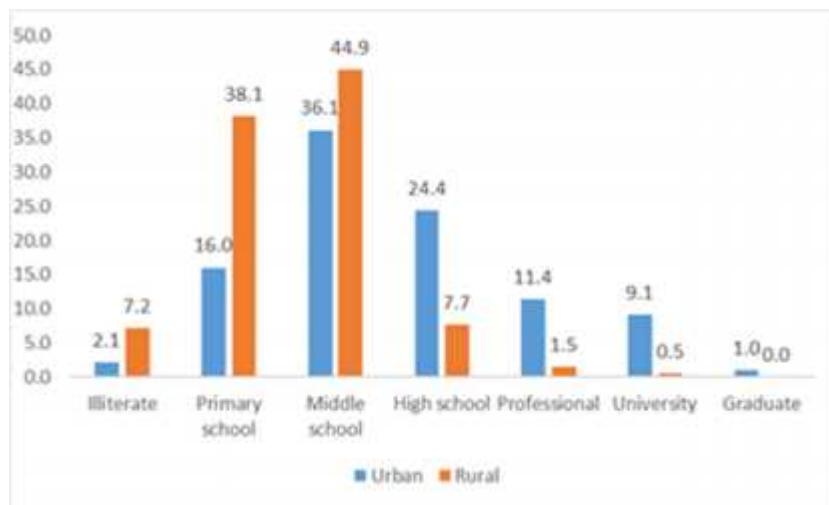
Source: ILOStat

Even in High-High countries, the NEET rate ranges from 15 to 21.5 per cent; NEET is also very high in some High-Low/Low-High countries, i.e. Lao PDR, Bangladesh, Sri Lanka and Pakistan. In comparison, NEET rates in Low-Low countries are relatively low. Of great concern is the female-male NEET rate gap, which is everywhere positive, highlighting the relative disadvantage of female youth throughout Asia in obtaining education or a job. The gap reaches extraordinarily high levels in Bangladesh, India and Pakistan (High-Low/Low High countries), and remains sizeable in Sri Lanka, Indonesia and Myanmar (a mix of country categories). Assuming that these patterns also hold for rural

areas of these countries, then the lower rates of LFPR participation among young rural females does not imply higher rates of schooling, but perhaps implies engagement in household work and childbearing/rearing.

Data showing urban-rural breakdowns in educational indicators are scarce. Figure 4 presents one such breakdown that is available: the highest educational attainment of the population in China. The bulk of the population as of 2010 had completed up to either primary or middle school. However, a greater proportion of the population has achieved higher educational attainment in urban areas than in rural areas. Whereas a quarter of population have completed upper secondary in urban areas, only 7.7 per cent have done so in rural area; the disparities are similarly wide for higher tiers of schooling. Returns to schooling are high and rising over time; however, this is largely driven by high and rising returns in urban areas, which reached 11 per cent in 2007, compared with only 2.7 per cent in rural areas (Xing, 2016).

**Figure 4.** Proportions in population aged 6 and above, by educational attainment and area, China, 2010 (%)



Source: Xing (2016)

Not only are rural youth disadvantaged in terms of amount of education, but in developing countries the quality of education is also wanting, so much so that the World Bank (2018) refers to it as the “learning crisis”. In rural India in 2016, fewer than 28 per cent of students in grade 3 could master double-digit subtraction. Similarly, in urban Pakistan, two fifths of grade 3 learners in schools could not perform two-digit subtraction; the proportion rises to three fifths in rural areas.

### 3.3 Other institutional barriers

#### Access to land

It is widely accepted that, relative to adults, young men and women in agriculture often lack access to land and financial services (FAO, 2017). Lack of access to land is a key factor behind unemployment of youth in farming communities (World Bank and IFAD, 2017). Inheritance norms imply that youth must wait a considerable length of time before gaining control of land; these norms are especially skewed against women, as male heirs are preferred (Bennell, 2007). The older generation may opt to sell the land, excluding the children from access entirely (White, 2012). Moreover, in rural Asia farm sizes have become highly fragmented, rendering further subdivision among living heirs highly impractical.

## Access to credit and information

For credit, financial service providers require debt guarantees prior to releasing loans. Such guarantees take the form of formal land titles, a formal occupation, real or movable properties, solidarity group guarantees or personal guarantors – all of which youth are less likely to possess than a borrowing adult (IFAD, 2014).

There is one bright spot, though, for rural youth, and this is in the realm of information and technology services. In rural India (and probably all over rural Asia), young men and women tend to be early adopters of household telecommunication services (Tenhunen, 2018). They provide technical support, as it were, to older family members in the use of smartphones. Hence they serve as intermediaries to improved information about farming (e.g. weather forecasts, better seeds, better management practices), as well as marketing (e.g. price offers of various traders).

# 4. Areas for investment in rural youth

## 4.1 Overview

The following discussion focuses on programmes targeting rural youth. For rural Asia, a number of youth-oriented programmes have been documented, covering objectives, activities, outputs and perhaps outcomes. However, rigorous impact evaluation is sparse; any evaluations that do exist are of rural or agricultural interventions with no specific youth focus. Nonetheless, these studies will be cited, wherever relevant, inasmuch as efforts to address either rural or youth development are likely be favourable as well to the subsector of rural youth.

## 4.2 Education

Investments in education from secondary level onwards are inherently focused on youth. However, few evaluations have focused specifically on the secondary and higher levels. A broad synthesis evaluation of education interventions in low- and middle-income countries (Snilsveit et al., 2016) adopts a typology of: children and households (i.e. demand-side interventions); teachers and schools (supply-side interventions); and systems interventions that seek to reform the delivery system, for example community-based monitoring, school-based management interventions and public-private partnerships. Many of the studies in the synthesis were conducted in Asian countries.

### General findings

**Demand side:** various programmes try to address barriers and constraints to school participation and learning facing children and households, e.g. addressing poor health and malnutrition, or providing material incentives for schooling. Based on evidence from 107 studies, such demand-side interventions may be particularly effective at achieving different objectives. For instance, cash transfers increase school participation; however, when targeting learning outcomes, merit-based scholarships are most effective. Providing meals at school is a promising intervention for improving test scores and school participation. However, few conclusions can be reached regarding information services to children/parents, reducing user fees and school-based health programmes, owing to the sparsity of research.

**Teachers and schools:** changing the classroom environment through structured pedagogy had the most consistent positive effects on learning. Also promising are programmes of remedial education, additional instructional time and construction of new schools. Materials and technology ("hardware" programmes) can be rendered ineffective if poorly designed and implemented.

**Systems:** community-based monitoring interventions provide a platform for parents to demand better education, and increase the accountability of schools to the communities served. Private-public partnership largely takes the form of public support of low-cost private schools. Lastly, school-based management involve decentralization of decision-making to the school level, exercised by committees composed of school leaders, teachers, parents, students or other community members. Evidence on low-cost private schools and community-based monitoring is encouraging in terms of school participation, and perhaps even learning, in the case of community-based monitoring. The same cannot be said of school-based management.

### **Applications to youth in Asia**

On the demand side, merit-based scholarship was found to increase enrolment among secondary school girls in Cambodia (Filmer and Schady, 2008). Also found to increase secondary school enrolment, this time for both boys and girls, is a conditional cash transfer scheme in the Philippines (Orbeta et al., 2014).

Lastly, the impact of information and counselling programme for lower secondary school students in poorer communities of China was evaluated by Loyalka et al. (2013). Based on a randomized experiment, information services were found to have no significant effect on student outcomes; and counselling tended to increase dropout, as students were apparently better informed of the difficulties of completing upper secondary school.

On the supply side, a synthesis of education evaluation specific to South Asia (Asim et al., 2015) revealed that positive learning effects can be achieved at moderate cost by expanding and updating the school curriculum, providing remedial education and making better use of information technology (but not to the extent of one laptop per child, found to be ineffective by Sharma, 2012, in Nepal). Meanwhile, placing a new school in a village (whether the village's first school or an additional facility) can have positive effects on both enrolment and learning. School-building programmes rank among the most cost-effective education interventions in South Asia. In contrast, cash transfer schemes were found to be effective only for increasing enrolment.

Some of these findings have been applied to secondary school interventions. Construction of school latrines (sanitary toilets) has been found to substantially increase enrolment of pubescent-age girls. Health outcomes improved for both young girls and boys. However, there was no significant impact on students' test scores (Adukia, 2017).

Inculcating cross-cutting cognitive and life skills has received relatively little attention in an Asian setting. Life skills training (LST) aiming to reduce tobacco and drug use was subjected to a randomized test among high school students in Thailand. Relative to a control group (following a conventional curriculum), students in the LST programme exhibited statistically higher knowledge levels, improved attitudes, and greater development of refusal, decision-making and problem-solving skills (Seal, 2006).

A worldwide study of sexual and reproductive health education, counselling and contraceptive availability (Salam et al., 2016) finds that the set of interventions is effective at increasing adolescent knowledge related to sexual health and contraceptive use, and ultimately at reducing adolescent pregnancy. The review includes community-based programmes targeting young couples in rural Bihar, in India, which have been effective as well (Daniel et al., 2008).

Lastly, a public-private partnership approach was evaluated for Pakistan under the Foundation Assisted Schools (FAS) programme in Punjab. Most of the FAS beneficiaries were middle schools. The main findings are that FAS significantly increased the number of students and schooling inputs such as teachers, classrooms and blackboards. Cost-effectiveness analysis suggests that subsidising low-cost private schools is one of the cheapest ways to increase enrolment (Barrera-Osorio and Raju, 2015).

### 4.3 Training and non-formal education

The previous subsection dealt mostly with formal education programmes. Human capital may also be developed by non-formal education programmes, such as technical and vocational education and training (TVET), and other formal and informal training initiatives. A study on Indonesian students finds that, for male students, graduating from TVET is associated with a 6 per cent higher chance of landing a formal sector job, compared with public high school graduates. Meanwhile for women, the wage premium earned by public TVET graduates is even higher, at 16 per cent (Newhouse and Suryadarma, 2011).

In Asia, linking vocational education with employment is the single most important factor in training success. Linkages can be developed by providing incentives for employers to participate in directing, advising and evaluating training, and incentives for training institutions to involve industry in training provision (ADB, 2004). Expansion of vocational programmes seems to be most beneficial in Asian countries where youth enrolment is currently low, such as Viet Nam and India. Training programmes should be geographically dispersed enough to help bridge the urban-rural divide (Zimmerman et al., 2013).

For agriculture, a popular extension modality is the farmer field school (FFS), a participatory form of extension service. A review of FFS experiences worldwide concludes that FFS benefits participating farmers in the form of improved knowledge, improved knowledge, adoption of beneficial practices, agricultural production and profit (Waddington and White, 2014). The FFS approach has branched out to health intervention, targeted at young farmers, in the Farmer Life School and Junior Farmer Field and Life School pioneered in Cambodia (Braun and Duveskog, 2008; Yech, 2003).

In one project in Bangladesh, the FFS approach was found to be an effective mechanism for assisting poor rural households, including landless and often marginalized population groups. Moreover, there is the potential to effectively involve large numbers of women, including young women and women from indigenous populations (DANIDA, 2011).

Agricultural training and extension can benefit greatly from ICT (Cole and Fernando, 2012); this technology bodes well for rural youth participation, as they tend to be early adopters of ICT in the villages. In Nepal, for instance, an e-agriculture application called Krishi Ghar uses mobile and web technology to complement traditional extension. Since the end of 2014, Krishi Ghar is estimated as being used by more than 1,500 farmers. It also uses social media to disseminate agricultural information, with around 13,000 farmers having benefited, of whom 80 to 90 per cent are estimated to be youth.

### 4.4 Enterprise assistance and financial services

Social funds/microcredit operations are effective financial instruments that can be easily inserted in community demand-driven interventions for rapid job creation with extended outreach (World Bank and IFAD, 2017). Throughout Asia, a number of youth enterprise projects have been implemented to support self-employment. The evidence on micro-credit and micro-savings suggests that there is a causal link with poverty reduction, but that micro-credit and micro-savings do not work in all circumstances or for all clients. Moreover, whereas encouraging frugality is almost universally commendable, caution must be applied towards lending schemes which raise indebtedness (Stewart et al., 2012), especially for youth. Lastly, regarding enterprise support, finance alone has been found to be less effective than training or business development services. On the whole, however, evidence on long-term effects and cost-effectiveness of enterprise support is scanty (Grimm and Paffhausen, 2015).

**Box 1. Examples of youth enterprise assistance in Asia****Youth Entrepreneur Loan Project**

In 2008, the Grameen Bank started the Youth Entrepreneur Loan Project (YELP). Workshops are conducted with young borrowers, where they are taught to be innovative, take the initiative and make environmentally friendly choices. Loans are repayable over 2 years, though flexibility is built in depending on the project size, the business plan, costs and returns. The annual interest rate is 20 per cent; repayment begins no later than 8 weeks after receiving the loan. In order to reduce investment risks – natural catastrophes, fires, accidents, serious disease, robbery – a risk fund was also created. The fund requires an obligatory life insurance payment by the borrower equal to 3 per cent of the loaned sum. Up to August 2011, loans had been provided to more than 1,432 young entrepreneurs, of whom 154 were young women. Businesses were created in trading, computer services and training, clinics and health care, poultry, livestock and fisheries, phone and fax centres, and fashion houses. By 2011, loans provided under YELP totalled US\$1.9 million, and the largest loan was US\$0.8 million. The total repayment rate is 99 per cent.

**Youth Social Entrepreneur Initiative**

The Youth Social Entrepreneur Initiative (YSEI) was founded in 2005 to provide financial support to youth (aged 19-30) in Asia. Start-up support includes financing of up to US\$15,000; development knowledge; tools for social entrepreneurship; and technical consultancy through mentorship and access to diverse networks. The YSEI has been implemented in India, Bangladesh, the Philippines and Timor-Leste.

Source: FAO (2014).

## 4.5 Access to land

One way to open up access to land for rural youth is by the use of titling programmes over public land. Lawry et al. (2017) point out there is some, albeit limited, quantitative evidence showing the benefits of freehold titling programmes, in terms of productivity and expenditure measures. Such programmes tend to secure tenure for cultivators, in turn promoting long-term investment.

Other methods to promote access to land are providing legal services and legislation to recognize and defend the land rights of women and youth; and development of land rental markets as a mechanism for accessing land (Bennell, 2007). A similar set of recommendations was offered by the World Bank and IFAD (2017):

- Digitize land registries and take advantage of ICT, thereby modernizing land administration systems. Developing countries in Asia can benefit from the experience of developed countries that have already adopted electronic systems.
- Remove remaining constraints on land rental markets.
- Design market-based land reform with incentives that increase the bargaining power of land-poor buyers relative to land-rich owners.
- Strengthen tenure rights for women through land inheritance rights, individual titling for women farmers and joint titling for married couples.

## Summary and conclusion

In this background paper, we seek to highlight rural youth within the overall narrative of structural and rural transformation in APR. Ideally, in a developing economy, rural youth are investing in human capital formation, and as young adults becoming employed in better-remunerated work than the previous generation. In reality, numerous structural barriers may be hindering rural youth, especially girls and women, from acquiring requisite skills and knowledge, as well as making the transition to employment appropriate to a transforming economy. Rural development programmes should therefore devise interventions and make investments in overcoming these barriers.

Deeper investigation into transformation trends in relation to rural youth is, however, stymied by insufficient disaggregation of existing data on employment and incomes by sector, age group and area (urban or rural). For instance, information on the importance of agriculture and non-agricultural activities for rural youth is scanty, let alone further disaggregation within rural areas (i.e. peri-urban zone versus rural interior, etc.). Nonetheless, the following can be summarized based on available data:

- Youth in APR mostly reside in rural areas. As children, an even bigger proportion reside in rural areas, suggesting that youth are already in the process of migrating to towns and cities, to find work or undergo schooling.
- Youth labour force participation is higher in rural than urban areas, and for males than females. About one fifth of youth in Asia are not in education, employment or training. More than 86 per cent of employed youth in Asia and the Pacific are in the informal sector, which is greater than the proportion of informal employment among adult workers (67.1 per cent).
- Rural youth in Low-Low countries continue to rely on agriculture for employment; in high structural transformation countries, however, the majority are already employed outside agriculture, even though agriculture continues to be the biggest employer.
- Rural youth tend to exhibit lower levels of human development than their urban counterparts; in South Asia the disadvantage of young females is pronounced.
- Rural youth face barriers to migration, education, access to land, farm technology and financial services.

In-depth and disaggregated impact evaluations analysing programmes and interventions aimed at rural youth are also scanty. The need for more such evaluations is great, preferably those based on randomized experiments, or otherwise on quasi-experimental evaluation with adequate controls. Some implications of existing programme reviews can be summarized as follows:

- **Access to land:** freehold titling programmes may offer opportunities for improving tenure for rural youth who are already cultivating land. Other land-related interventions are provision of legal services and legislation to recognize and defend land rights for women and youth; development of land markets as a mechanism for accessing land; and taking advantage of affordable ICT to establish digital land registries.
- **Education and human development:** certain types of investments in basic education in rural areas improve enrolment and learning outcomes. FFS approaches are also effective, with the potential to increase the participation of marginalized groups such as young women and women from indigenous populations. ICT can promote agricultural extension, which appears to augur well for youth, who appear to be pioneer adopters of ICT in rural villages. Expansion of vocational education is beneficial especially where its incidence is low, and where it is targeted to bridge the urban-rural divide. In Asia, linkage with employment is the single most important factor in training success. Furthermore, sexual and reproductive health education, counselling and contraceptive availability are effective in increasing adolescent knowledge related to sexual health, increasing contraceptive use and decreasing adolescent pregnancy.

- **Access to finance and enterprise support:** social funds/microcredit operations are effective financial instruments that can be easily inserted in community demand-driven interventions for rapid job creation with extended outreach. Enterprise support should not rely on credit alone but should also provide a wider range of business development services.

Overall, the review of stylized facts suggests a broad consistency with the framework of structural and rural transformation: Low-Low and, to some extent, High-Low countries are still at the transition stage at which basic investments and addressing institutional barriers are the priority intervention loci.

Meanwhile, High-High (and, to some extent, Low-High) countries should continue basic investments while also prioritizing the matching of rural youth skills to the needs of the labour market, together with expanding youth participation in a dynamic MSME sector.

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