Afghanistan’s Jobs Challenge

Afghanistan’s development progress has been substantial over the past decade. First, the country experienced exceptionally high levels of economic growth: real GDP grew at an average of 9.1 percent between 2003/04 and 2010/11, mainly driven by capital investments for reconstruction activities, large aid flows, and occasional spikes in agricultural production. Achievements in terms of growth have been accompanied by marked improvements in socio economic conditions of the Afghan population: millions of people in rural Afghanistan now have access to primary health care for the first time and school enrollment has increased from one million in 2002 to 7.2 million children in 2011, of which 2.7 million (37 percent) are girls (entirely excluded from education under Taliban regime). In spite of the efforts made, Afghanistan’s development challenge remains pressing. With 36 percent of the Afghan population living below the poverty line in 2007/08 and more than 50 percent vulnerable to becoming poor, a sustainable pathway to socio-economic inclusion is a top priority moving forward.

Jobs are at the center of Afghanistan’s development future. Afghanistan’s future, in terms of development and stability, is strongly intertwined with the country’s ability to sustain growth and to guarantee inclusiveness through more and better employment opportunities. To this end, a strategic alignment of policy priorities towards addressing labor market challenges and supporting job creation is crucial to realizing the country’s development potential and contributing to poverty reduction and social cohesion. In particular, policies need to be aligned to enable sufficient growth to create enough jobs to accommodate a growing labor force. With an estimated 400,000 to 500,000 new labor market entrants per year over the next decade, supporting the growth of labor rich sectors has to be a top priority in the agenda of policy makers. At the same time, the skill profile of the labor force needs to be raised to match labor market demand and to guarantee the increase in productivity on which to build a sustainable growth path.

Understanding Afghan labor market’s characteristics is a crucial step in the development of a strategy for employment generation. An analysis of the Afghan labor market is hindered by the scarcity of available data. At present, the only reliable and nationally representative source of information is provided by the National Risk and Vulnerability Assessment (NRVA) household survey. Ahead of the release of the new survey round 2011/12 expected over the next few months, the analysis of the latest NRVA 2007/08 survey presented in this report provides a good starting point to profile the characteristics and challenges of the labor market in Afghanistan and to hopefully inform an evidence-based discussion of an employment generation strategy moving forward.

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1 National coverage rates rose from nine percent of the general population in 2003 to 85 percent in 2008.
2 According to official statistics, a 36 percent poverty rate translates into approximately nine million Afghans not being able to meet their food and non-food basic needs.
Profiling the Afghan Labor Force

The Afghan labor market is characterized by a young and fast growing workforce. Decades of conflict, international migration and relatively high fertility rates make Afghanistan—together with Pakistan and Nepal—one of the youngest countries in South Asia⁴. The share of population aged 15 or below is as high as 51.3 percent, meaning that more than one in every two Afghans is economically dependent⁵. As shown in Figure 1, Afghanistan’s population pyramid is characterized by a wide base that will maintain a sustained rate of growth in the number of new labor market entrants for the decade to come, especially in rural areas. It is estimated that the labor market will have to accommodate an annual flow of 400,000 to 500,000 new labor market entrants over the coming five to 10 years⁶. While return migration represented a big shock to population totals for the years immediately following the fall of the Taliban regime, in-migration is not expected to represent a big challenge going forward but rather a possible mechanism to ease population pressure on the labor market (Box 1).

The Afghan labor market is characterized by a strong urban-rural divide. According to NRVA data and considering the national labor market as a whole, 66.5 percent of individuals in the working age population (aged 16 and above) participate in the labor market, 62.5 percent of individuals in the working age population are engaged in some form of employment during the month preceding the date of interview, whereas 7.85 percent of the labor force can be broadly considered as unemployed. Interesting differences in labor market functioning emerge when disaggregating the picture by area of residence. In particular, the urban labor market shows significantly lower participation and employment rates, mainly due to the lower participation of women, youth and elderly in urban labor markets.

The relatively low level of open unemployment is counterbalanced by the severity of underemployment. More than 48 percent of employed individuals work on average for less than 35 hours per week and could be broadly considered as “underemployed”⁷. Underemployment is naturally correlated with the urban-rural divide in labor market participation (and employment) patterns. In particular, - higher participation in rural areas is associated with a substantially higher underemployment rate and, possibly, with a relatively higher prevalence of poor quality jobs.⁸

⁵ The dependency ratio—defined as the number of children aged 0-15 over the working age population (16 and above)—is 52.44 percent and 46.68 percent in rural and urban areas, respectively.
⁶ These estimates were obtained using UN population projections by age categories and by gender, and assuming that age group and gender specific labor market participation rates will remain stable over the next 5-10 years. Projections based on National Risk and Vulnerability Assessment (NRVA) population data lead to similar results—approximately 470,000 new labor market entrants per year.
⁷ The exact definition of underemployment would also require assessing workers’ willingness to work for additional hours. Unfortunately, the survey instruments do not have a specific question enabling to distinguish effective “underemployment” from those willingly working “part-time” and not wishing to work for additional hours. Improving NRVA instruments to uncover the effective magnitude of underemployment would be useful for a more complete understanding of labor market functioning in Afghanistan.
⁸ Underemployment affects 53% of employment in rural areas against 22% in urban centers.
Box 1: Population Pressure and Returned Refugees

With the fall of the Taliban regime in 2001 and the rise of a new transitory authority in Kabul, emphasis was put on the repatriation of Afghans who previously fled because of decades of conflict. In 2002, the Government of Afghanistan, together with UNHCR and the Governments of Iran and Pakistan, signed a Tripartite Repatriation Agreement to encourage the process of voluntary return.

It is estimated that five million Afghan refugees have returned since 2002, increasing Afghanistan’s overall population by approximately 20 percent (UNHCR, 2011). Besides the magnitude of such population inflow, it is to be noted that 80 percent of repatriation occurred during a limited three-year time span, between 2002 and 2005. The inflow was not uniform over Afghanistan’s territory, with provinces in the Central, Eastern and North Eastern regions being mostly affected, further challenging the local economies’ absorption capacity.

There is a growing consensus that the reintegration of these households in their communities of origin has not yet been fully achieved, mostly due to the limited absorption capacity of the local economies. Often times, secondary migration movements reflect the significant difficulties that many former displaced households face on returning to their pre-conflict livelihood arrangements, mostly because of lack of access to (scarce) land resources. If some of the returnees successfully reintegrated taking advantage of skills and capitals accumulated during the period of exile, many others crossed their paths with those of households who were being internally displaced because of conflict.

In this context, given the current economic and security challenges faced by the country, and considering the decreasing trend observed over the past five years, massive repatriation of former refugees seems unlikely. On the other hand, new waves of out-migration could gain relevance, especially for the most educated segments of the Afghan population.
The Afghan labor force is male-dominated, due to significantly lower female participation rates. Almost seven out of 10 workers in Afghanistan are men, reflecting strong gender-based differentials in labor force participation. According to 2007/08 NRVA data, while almost every man in the age range 25-50 is economically active, approximately only one out of every two women participates in the labor market (Figure 3). Gender gap in participation rates is the strongest in urban areas, where only one out of five women is active on the labor market⁹. The role of women in the Afghan labor market is marginal. Of the 46.5 percent of women participating in the labor market, only 25 percent are actually engaged in paid-employment, almost exclusively in the informal sector. In general, households rely on female

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⁹ Participation rates tend to be higher in rural areas, mostly due to labor intensive and low productivity employment in the agriculture sector.
employment as a last resort and female labor mainly serves as a buffer stock to be used in times of need and/or when labor demand is the highest\textsuperscript{10}. While low rates of female participation are common to other countries in the region, the general lack of female economic empowerment has important implications on intra-household resources allocation, with negative implications on human capital investments for children and, more generally, on households’ economic wellbeing.

**Literacy levels in the Afghan working-age population are extremely low, especially among adults and women.** Poor literacy and education levels represent a strong constraint to labor market functioning, hindering overall productivity and limiting the scope for intra-sectoral mobility. Three decades of conflict have had long lasting consequences in terms of stock of human capital: only one out of four Afghans aged 16 or above is able to read and write or has completed some formal level of schooling\textsuperscript{11}. These figures place Afghanistan in a very disadvantageous position with respect to other countries in the region, and represent a strong constraint to its capacity to attract productive investments and to future growth. The limited local availability of a skilled labor force has also shaped the poverty reduction potential of aid-induced growth that has occurred since 2001. Evidence suggests that, because of local skills shortage, many of the good quality jobs created in the growing service and construction sectors had been filled recurring to imported labor.

**Education levels are improving for younger cohorts, benefiting from post conflict investments in education.** As is evident from Figure 4, literacy rates tend to be on average higher for younger people, especially in urban areas where schools are more accessible and where most of the skilled labor force migrates looking for employment opportunities. Low skill employment will remain dominant until older workers retire and/or have their skills improved through training. However, it is important that the education system accommodates increasing demand for higher education\textsuperscript{12} and that the labor market provides enough good quality jobs to meet the increasing influx of younger and more educated workers (Figure 5). Every year, about 40,000 high school and 4,000 university graduates will enter the labor market and will look for good quality jobs, mainly in the public sector. While these figures provide only a lower bound to the supply of more educated workers\textsuperscript{13}, they still give a sense of the new pressure the urban labor market will face in the incoming years, especially if the number of formal and good quality jobs in the public sector will decrease when aid and international military expenditures are phased out.

\textsuperscript{10} Female labor force participation is strongly correlated with seasonal labor demand in agriculture, reaching its peak during summer harvest times. Moreover, female participation is strongly correlated with household wellbeing, being the highest in poorest households. As discussed in the Poverty Status Report, relatively higher participation rates in rural areas are strongly correlated with lower levels of wellbeing and with the prevalence of underemployment, especially among marginal workers\textsuperscript{10}: women, youth, and elderly.

\textsuperscript{11} In particular, the breakdown by education achievement of the working-age population is as follows: 75 percent do not have any formal education; 8.7 percent have completed primary education; 6.5 and 7.5 percent, respectively, have secondary and high school diploma; and 2.2 percent have completed university, college or post graduate studies.

\textsuperscript{12} See the National Higher Education Strategic plan (NHESP).

\textsuperscript{13} Estimates based on NRVA 2007/08 education and participation figures assuming no change in education levels in the active population below the age of 30.
Figure 4: Literacy Rates by Age Group, Area of Residence and Gender

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08

Figure 5: Skill Composition of the Labor Force Aged Below 30, by Area of Residence and Gender

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08
Labor Demand: Jobs in Afghanistan

Households are the first employer in Afghanistan, while the formal labor market is very thin and dominated by the public sector. As common to other fragile and less developed countries, self-employment working arrangements are the most common form of employment in Afghanistan, both in rural and urban areas where they account for 43 percent and 49 percent of the total, respectively (Figure 6). Afghan households represent the first source of jobs in Afghanistan. Including unpaid family work, Afghan households are responsible for as much as 77 percent of total employment nationwide, or about 5.8 million jobs. If one was to aggregate the number of self-employed, contributing family workers and day laborers into a broader ‘informal employment’ category, the formal labor market share will result to be extremely low, representing only 9.4 percent of total employment nationwide. As expected, formal employment is more common in urban areas, mainly due to the contribution of public jobs, which represent 20 percent of total employment in Afghan cities and twice the number of salaried jobs in the private sector, nationwide.

Agriculture is the largest sector of employment in Afghanistan. Workers employed in the agriculture sector represent 60 percent of total employment, meaning that three out of five workers have their main source of income in farm related activities. This share is of course higher in rural areas, where employment in agriculture in almost 70 percent. Employment in agriculture is mainly characterized by small family businesses that half of the time produce for mere subsistence and seldom provide enough resources to sustain families throughout the year. As shown in Figure 7, there is wide regional variation in the share of households relying on agriculture for living, as well as substantial differences in the type of agricultural activity (subsistence, market or wage labor). Interestingly, higher reliance on agriculture is not necessarily related to higher poverty rates at the regional level, whereas the prevalence of home consumption/subsistence agriculture is generally associated with a higher risk of poverty. The difference between the Southwest and Northeast or West Central regions is striking, with the Southwest relying heavily on farm/market based agriculture (mainly opium and other cash crops production) and the other two regions being predominantly subsistence based.

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14 According to ILO’s definition of informality, informal employment refers to jobs without any written contract and lacking social security coverage. The concept was adopted in the form of guidelines by the 17th International Conference of Labor Statisticians (ICLS) in an attempt to capture the increase of unprotected jobs in both formal and informal sector (OECD; 2009).

15 Formal jobs represent 29 and six percent of total employment in urban and rural areas, respectively.

16 As discussed in the Poverty Status Report, for rural households engaged in agriculture, relying on more than one income source throughout the year is a necessity, especially during winter and spring months.
Figure 6: Type of Employment by area of residence

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08

Figure 7: Share of Households Relying on Agriculture as Main Source of Livelihoods and Poverty Rate, by Region

Note: Poverty rate on the secondary axis
Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08

Figure 8: Sectoral Distribution of Non-Farm Employment (Percent of Total Employment), by Area of Residence

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08
The non-farm sector is dominated by employment in family-based, small-scale trade activities. Retail trade, with petty trade and shop-keeping activities, represents the main source of employment in the non-farm sector, followed by services and construction that benefited enormously from the massive inflow of aid over the past ten years (Figure 8, Box 2)\textsuperscript{17}. Public sector is another key source of employment opportunities in urban areas, where it accounts for about 158,000 jobs\textsuperscript{18}, 80 percent of which are located in Kabul province. The manufacturing sector only plays a small role, accounting for only five percent of total employment nationwide.

**Box 2: International Aid and the Growth of the Non-Farm Sector in Afghanistan**

Due to the nature and type of donor involvement in Afghanistan, much of security and civilian aid spending has been allotted to construction and services, in particular transportation and logistics, retail and maintenance/repair. In contractual spending by the United States for Afghanistan alone, these sectors account for a share of over 75 percent.

The order of magnitude for job opportunities created directly by aid contracts is estimated to be between 312,000 and 620,000 for 2010, but these figures remain highly uncertain due to the lack of data and also due to the short-term and casual nature of most of the job created.

A study by the Peace Dividend Trust (2011), which surveyed 146 local businesses that won aid-financed contracts between 2006 -2011, found that the average length of a contract was six months with over half of the jobs lasting less. But it also found that efforts to improve local sourcing lead businesses to retain some of the workers they employ: 58 percent of businesses that won aid-financed contract tenders ended the assignments with more employees afterwards than they started with. In this particular study, the authors conclude that the contracts, which had a total value of $1.1 billion, created an estimated number of 118,000 jobs for six months.

Some other sources provide the following information: The Ministry of Finance reports that, in 2010, 6,647 individuals working within the Government received salaries or salary top-ups financed by donors. Adding the number of policemen and soldiers financed through donor trust funds, this number increases to 278,887. ISAF registers between 60,000-80,000 Afghans directly employed through various military-related contracting agencies without a notion of the length of employment or possible errors due to double counting. The United States Agency for International Development (USAID), depending on the source, estimates between 31,600 and 60,000 jobs created through USAID contracts. However, it is unclear if this number includes second round effects—for example, jobs created indirectly through aid money via the economic stimulus. USCENTCOM reports that US financed contracts employed between 34,200 and 78,500 Afghans, including contracts carried by USAID and military agencies. NGOs are believed to employ around 16,600 Afghans. There is, hence, much uncertainty even with regard to direct employment through aid contracts.


There are strong sectoral differences in the education and gender composition of the labor force. As shown in Figure 10, the agriculture sector is the one with the highest prevalence of low skilled jobs, with 87 percent of workers employed in agriculture not having any formal education and unable to read and/or write. Similarly, low skill levels are reflected in the characteristics of jobs in the construction and in the residual ‘service’ sectors, which have been among the fastest growing sectors of employment

\textsuperscript{17} The non farm sector accounts for 32 percent of employment in rural areas and 91 percent in urban ones.

\textsuperscript{18} This corresponds to 14 percent of total employment in urban areas.
following the past decade, fueled by the massive inflow of international aid. Interestingly, employment in the manufacturing sector predominantly comprises an uneducated workforce, mainly due to the over-representation of women who account for almost 70 percent of workers (Figure 9).

The distribution of employment type and the degree of informality is strongly correlated with the characteristics of employment sectors. Differences across sectors in workforce education and gender composition are strongly correlated with the distribution of employment typologies (Figure 11). Unpaid family work is prevalent in agriculture and in the low skilled service sector, reflecting a higher concentration of female employment. On the other hand, casual (day) labor is prevalent in the mining and quarrying sectors and in construction, also connoted by a prevalence of low skilled employment. Trade (retail and wholesale) and manufacturing show the highest prevalence of own account employment; private sector salaried jobs are mainly found in the transport and communication sector, whereas public sector salaried jobs prevail in government, education and health sector jobs.

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Figure 9: Gender Distribution of Workers, by Sector of Employment

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08

19 Farm and nonfarm sectors in Afghanistan differ substantially in terms of workers’ characteristics and type of jobs. In particular, illiterate and unpaid (non wage) family workers are over-represented in agriculture, where almost 80 percent of female employment is concentrated.
Strong sectoral difference in skills and employment patterns are strongly reflected in the ‘quality’ of employment. The main dimensions generally used to assess job quality are earnings and stability. As shown in Figure 12, daily labor emerges unequivocally as the lowest quality form of employment irrespective of the sector or employment (farm versus non-farm) and area of residence (rural versus urban). Consistently lower monthly earnings are mirrored by a higher risk of poverty, especially in urban areas; of 140,000 day laborers employed in urban areas, half belong to households living in poverty, consistently higher than the poverty rate of casual workers in rural areas. On the opposite side of the quality spectrum, the highest returns accrue to non-farm salaried employment in urban areas, mostly due to the concentration in this category of formal public employment, where most of the highest educated segments of the labor force find stable employment.

For a detailed discussion of the issues around employment quality, see World Bank 2011 “More and Better Jobs in South Asia.”

This reflects the secondary and seasonal nature of casual employment in rural areas, mostly concentrated in agriculture during the peak harvest season.
Figure 11: Employment Type Distribution and Percentage of Poor Workers, by Sector of Employment

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08

Figure 12: Percentage of Workers in Households Below the Poverty Line, by Employment Status and Area of Residence

Source: World Bank Staff calculation, National Risk and Vulnerability Assessment (NRVA) 2007/08
Strategic Pillars for Inclusive Growth and Job Creation

PILLAR 1: Raising Productivity in the Agriculture Sector

Any growth strategy aiming to include the poorest segments of the Afghan population cannot avoid a focus on agriculture. Agricultural growth has long been recognized as an important instrument for poverty reduction, especially in countries where rural areas account for the bulk of the (poor) population, and where the dependence on labor-intensive agriculture is the highest. In the case of Afghanistan, where rural areas account for 80 percent of the population and 84 percent of poverty nationwide, improving productivity in the agriculture sector has the potential of directly affecting lives of about seven million Afghans, four million of whom live in conditions of poverty. Agriculture growth offers rural households a number of pathways out of poverty: they can increase their incomes by selling agricultural products in markets, they can leave the subsistence economy and become market participants, and they can improve their well-being in the subsistence economy either directly through farming or through better opportunities in the non-farm sector.

Supporting agriculture sector development provides foundations for sustainable and inclusive growth in coming years. Over the past 10 years, growth in Afghanistan has been mainly driven by the influx of international aid, which has in turn stimulated growth in service and construction sectors. On the other hand, the agricultural sector has remained at the margins of modernization, as indirectly evidenced by the high volatility of its performance due to climatic shocks. Looking forward, given current prospects of a decreasing trend in international aid inflows, sustaining (inclusive) growth and guaranteeing enough employment for a growing labor force through services, construction and mining seems overly optimistic. This is due, first of all, to the expansion of services that has mainly come from public employment, telecommunication and transport, all subsectors that are likely to suffer the most from aid transition and that have the lowest ‘inclusiveness’ features due to the higher skills demanded. Second, construction sector growth has mainly originated as support to military/security operations and has only generated very low end, casual employment. Third, the direct employment impact of the mining sector is expected to be very modest and mostly localized.

Increased productivity in agriculture has the potential to generate important positive spillovers to the rest of the economy. Besides its direct effects on GDP growth, increasing agricultural productivity has the potential to generate important spillovers to other sectors of the economy. First, increased agricultural output will have a positive impact on real incomes of Afghan households and result in higher

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22 The agriculture sector provides livelihoods for 51.4 percent of rural households, almost half of which rely on traditional subsistence agriculture.

23 Once considering both expenditures for security and non security, foreign aid accounts for as much as 86 percent of country’s GDP in 2009/10. The increase in (public) consumption generated by aid has stimulated the growth of the service and construction sectors, whose contribution to total value added has grown by 25 and 81 percent, respectively, since 2002.

24 During the period 2003/04-2009/10 real agriculture growth ranged from -19 percent to 47 percent. Given that agriculture makes up almost a third of GDP, this is the major source of fluctuation in overall GDP growth.
internal demand, both in rural areas, where it will stimulate growth and job creation in the non-farm sector, and in urban ones. Second, increased domestic production will help improve the country’s food security conditions and ease vulnerability to international price shocks. Third, investments and policies that are needed to support growth in the agriculture sector—such as improving infrastructure, improving access to credit and to land, improving literacy and providing efficient safety nets—have clear and positive cross-sectoral impact.

The agriculture sector has ample margins of growth in productivity. Decades of war have had a long lasting negative impact on agricultural productivity but also generated circumstances under which agricultural growth can result from both an increase in the amount of land available for cultivation (for example through investments to restore and improve irrigation and water management) as well as an increase in yields (for example through improved use of fertilizers, adoption of high yield seed varieties, increased R&D and extension services, etc.). According to NRVA 2007/08 data, despite shortages of agricultural land in the country, a significant portion remains under-utilized and left fallow during the main growing season mainly due to lack of water and poor soil quality. Only 63 percent of farmers use fertilizers (such as urea or DAP), only 16.5 percent use pesticides or herbicides, and only 10 percent of farmers obtained information or advice on crops or planning methods (among those who succeeded, the source of advice was mainly informal rather than from qualified experts).

Policies to support agriculture growth should be tailored to ease the constraints faced by poor households and smallholders. Strong population pressure on relatively scarce land resources, population displacement, and insecure property rights are all factors that have contributed to the current pattern of land distribution that is characterized by relatively small and unequally distributed landholdings. Smallholders, that is, the vast majority of households engaged in agriculture, face the strongest productivity constraints, which in turn impact their ability to move away from subsistence agriculture and take advantage of market opportunities. Policy interventions supporting agriculture growth should therefore have a specific focus on targeting smallholders and their needs. A number of the following policy options could help small-scale farmers in particular.

1. **Support access to credit, marketing, and technology.** Smallholders are more likely to face strong financial constraints to their activities due to the lack of asset ownership to serve as collateral.

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25 Afghanistan’s location and heavy reliance on Pakistan for imported wheat leaves Afghanistan vulnerable to fluctuations in Pakistani supplies and trade policies. For example, in 2008, Afghanistan’s food supply network broke down due to a confluence of events, including shortfalls in Pakistani and Afghan wheat production and Pakistan’s bans on wheat and flour exports.

26 According to NRVA 2007/08 data, in the top seven provinces where opium is grown as first crop, about 24 percent of households cultivate opium as the main crop. As opposed to wheat, which is mainly cultivated on rain-fed land, poppy is almost exclusively cultivated on irrigated land. Moreover, irrigated landholdings devoted to opium production are on average bigger than those assigned to wheat cultivation. According to UNODC in 2007, at the peak of opium production, the area under opium cultivation was 2.05 percent of the total land potentially available for agriculture in Afghanistan.

27 Some 28 percent of households with land access report that some of their plots are unutilized. On average, five jeribs of rain-fed land and 1.5 jeribs of irrigated land are reported to be left fallow during the summer season.

28 According to NRVA 2007/08 figures, the average plot size is about nine jeribs, equivalent to one jerib of land per capita, and half of the population of landowners holds less than 10 percent of total land.
(wealth rationing) and to the reticence to put assets at risk as collateral when they are vital to livelihoods (risk rationing). Small farmers are thus disadvantaged in the access to credit to finance productive investments and they lack resources to take advantage of market opportunities as well as new productive technologies. In order to ease these constraints, the Government may have to consider using subsidies on credit, inputs and new technologies, targeted to small farms. Moreover, supporting collective action and incentivizing the formation of local producers' organizations and cooperatives would increase smallholders’ market access and competitiveness as well as facilitate the delivery of Government assistance (group-based credit, in-kind input subsidies, extension services, etc.).

2. Promoting crop diversification towards the production of high-value commodities can play an important role in raising smallholders' income and in supporting diversification away from opium production\(^\text{29}\). To this end, the Government could consider increasing the support to horticulture sector development and high-value crops introduction\(^\text{30}\) (saffron, mint, cucumber) through subsidized credit access, investments in agriculture research, technology transfer and training in harvest and post-harvest technologies, investment in storage facilities and marketing services, etc.

3. Strengthen land policies reform and implementation As recognized in the Afghanistan National Development Strategy (ANDS), the existing framework of land property laws and institutions is weak, fragmented and incomplete, contributing to frequent disputes over land. Greater security of tenure and of property rights would support the development of an efficient market for land, facilitate productive investments to raise land productivity, help households to diversify their incomes, and facilitate exits from agriculture. To this end, and building on the experience of donor sponsored programs, the Government should continue and scale up efforts to promote land registration and land management, and support the development of a simple and coherent legal framework integrating national and customary laws.

Moreover, public investments in physical infrastructure and education are crucial complements to increase factor productivity in agriculture. Continuing to invest in the construction of roads, (as well as their rehabilitation and maintenance) will remain crucial to improving market accessibility, bringing down post farm-gate costs, raising competitiveness of Afghan products, and generating jobs for the non-farm, low skilled rural sector\(^\text{31}\). Moreover, public investments in storage facilities and other post-harvesting technologies and infrastructure will further contribute to raising incomes and value added in

\(^{29}\) To this end, the Government must promote a shift of agricultural research toward cash crops, livestock, and post-harvest technologies.

\(^{30}\) According to crop experts, horticulture—the growing of fruits, vegetables and flowers—is the only sector that offers competitive financial returns. Horticulture once made up 40 per cent of Afghanistan’s exports, but today the sector is hindered by antiquated production methods, old or non-existent processing facilities, and a lack of commercial nurseries. High value crops include mint, saffron cucumber, etc.

\(^{31}\) Of Afghanistan’s approximately 40,000 km of rural roads, it is estimated that 10,000 have been rehabilitated since 2001, which could have generated as many as 13.5 million days of employment.
agriculture\textsuperscript{32}. Public investments in human capital are another key ingredient to the development of productivity in agriculture. In particular, high returns should be expected from investments in rural education to address existing skills constraints within the adult population. As widely recognized in the literature on Total Factor Productivity (TFP) in agriculture, literacy and numeracy bring appreciable benefits to farm productivity and modernization, positively affecting the farmers’ ability to adopt new production technologies and take advantage of market opportunities.

**PILLAR 2: Improve the Quality of the Afghan Labor Force**

**The human capital stock in Afghanistan is extremely low.** Decades of conflict have had a long lasting impact on the human capital stock of the country. Despite significant improvements in school enrollment rates and education achievement in younger (urban) cohorts, the education gap remains substantial by international standards, also taking into account country’s level of development. The Government of Afghanistan has committed itself under ANDS to developing the skills of the Afghan labor force so that they are more productive, have more marketable skills and are therefore able to compete more effectively\textsuperscript{33}.

**Poor human capital endowments constrain Afghanistan’s growth potential.** Improving literacy, skills and education in Afghanistan, especially in rural areas, is a key priority to foster growth. A vast body of literature on the subject shows that investing in education and skills is crucial to sustaining a country’s growth. Shortages of human capital constrain the rate of return to physical capital, diminishing the profitability of investments, the adoption of new technologies, as well as the structural transformation of the economy. As shown in Figure 13, in each sector of the economy, the education of the Afghan labor force is the lowest among South Asia countries. Particularly challenging are education gaps in sectors crucial for future economic growth and development, such as, agriculture, mining, construction, commerce, and manufacturing.

\textsuperscript{32} Post harvesting activities include storage, processing, packaging, transportation, and marketing.

\textsuperscript{33} Government of Afghanistan; Afghanistan National Development Strategy; Pillar 3 Economic and Social Development.
Box 3: Afghan Diaspora and Remittances

It has often been said that the diaspora of developing countries possess considerable wealth that can be tapped for the origin countries’ development. By transferring part of their savings to family and friends back home through remittances and/or directly investing in creating businesses, migrants working abroad can substantially contribute to the growth and well being of their countries of origin.

It is estimated that more than 215 million people (or three percent of the world’s population) live outside their countries of birth and that remittances to developing countries reached as much as USD 372 billion in 2011, about three times the size of official development assistance.

Estimates of the contribution of migrants to Afghanistan’s economic development are complicated by the lack of data, mainly due to the informal channels used to transfer or invest money back home (hawala) and to the irregular nature of most of recent migration flows. Lacking official figures, estimates of remittances and of overseas investments from Afghan expatriates are obtained using available information on the size of the diaspora stocks in the different host countries, the average income of the diaspora members (adjusted for their skills and education level), and making assumptions on their propensity to save.

The Afghan diaspora accounts for about 2.4 million people (approximately 8.3 percent of the Afghan resident population), mainly residing in Iran, Germany, the United States, the United Kingdom, Tajikistan, Canada, the Netherlands, Australia, Saudi Arabia, and Denmark. It is estimated that diaspora savings in 2009 totaled as much as USD 2.6 billion, or about 22 percent of Afghanistan’s GDP.

**Improved human capital is also essential to reap gains from migration.** Labor mobility is one of the main strategies to address surplus of labor and stimulate development through the flow of remittances and skills between countries (international migration) and economic regions (for example, urban/rural migration). Since 2001, the character of Afghan migration has shifted from being forced and conflict driven, to economically motivated labor migration. According to NRVA 2007/08 data, 14 percent of households rely on seasonal migration, with at least one member engaged in seasonal labor over the year preceding the survey. Longer term cross border migration toward Iran, Pakistan and Gulf countries is also relatively common. In general, labor migrants have higher literacy rates and average years of education than non-migrants, suggesting the key role of education in reaping potential benefits from labor mobility.

**Addressing Afghanistan’s human capital challenges should focus on both the young and older generations.** On the one hand, progress in educating new generations should be supported and encouraged through interventions that direct education choices towards areas of skills shortages of specific sectors crucial for growth (agriculture, mining, constructions, and business management). On the other hand, current low levels of literacy and skills in the adult population are not compatible with sustained growth and should be addressed through ad hoc interventions through adult literacy and skills training programs. The current National Education Strategic Plan for 2010-14 (Box 4) is aimed at addressing both these goals. In particular, relevant focus is devoted to improving the supply of training and vocational education to reach a seven fold increase in enrollment in TVET and to improving literacy for individuals aged above 15, raising investment in literacy programs from USD 5 million in 2010 to USD 21 million in 2014.

**Box 4: Education Sector Goals: the National Education Strategic Plan 2010-14.**

Goals to be achieved in the education sector for the coming years are set in the National Education Strategic Plan 1389-1393 (2010-2014). In particular, the long term targets set out in the Strategic Plan envision that by 2020: (i) there will be an increase in the gross enrollment rates for boys and girls to 104 and 103 percent, respectively, and net enrolment rates to 98 percent for both; (ii) an increase in the number of students to around a half a million (at least 40 percent female); (iii) at least 95 percent of teachers will have successfully passed the national competency test; and (iv) the national literacy rate will be 75 percent.

In order to achieve these long-term objectives, the Plan identifies five priority programs as follows:

- **Program One: General and Islamic Education:** promoting equitable access to quality education to all school-age

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34 Recent World Bank research shows that an average 10 percent increase in the number of international migrants in a country’s population can lead to a 1.6 percent decline in poverty, and a 10 percent increase in the share of remittances in a country’s GDP can lead to a 1.2 percent decline in poverty. See World Bank; Global Economic Prospects; Washington DC; 2006

35 While insecurity in many provinces of Afghanistan continues to fuel internal displacement, there is evidence that, when forced to leave their communities of origin due to conflict, displaced households choose where to go (mainly urban areas) driven by economic considerations. See UNHCR, World Bank (2011).

36 The Plan envisages increasing the number of TVET regional institutes from 16 to 32; TVET provincial schools from 38 to 102; and establishing 364 TVET district schools. Increase enrolment in TVET institutions from 19,500 in 1388 (2009) to 150,000 in 1393 (2014).
children (both in basic, upper secondary education and Islamic schools) to acquire competencies needed for a healthy individual, family and social life, and to further their higher education.

**Program Two: Curriculum Development, Teacher Education and Science and Technology Education:** improving education quality by revising curricula and providing textbooks, by establishing a system to assess the learning achievements of primary and secondary students, and by increasing the number and the quality of teachers, with specific focus on investing in science and technology.

**Program Three: Technical and Vocational Education and Training:** increasing the supply of vocational education institutions, and their quality to support TVET enrollment and meet labor market demand.

**Program Four: Literacy:** providing literacy training to males and females aged 15 and above, through an estimated 140,000 literacy courses to reach the goal of 50 percent literacy rate by the end of 2014.

**Program Five: Education Management:** improving education infrastructures, administration and management.