Agriculture Sector Employment and the Need for Off-Farm Employment in the North-West Frontier Province

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I. AN OVERVIEW OF NWFP-THE SETTING OF THE STUDY

The North-West Frontier Province is essentially a mountainous region intermixed with fertile valleys of agricultural lands. The diversity of the region is well reflected through the agro-ecological regions map of the Pakistan Agricultural Research Councile where 6 out of the 10 regions indentified are found in the NWFP.

The total population of the NWFP stood at 11.1 million persons in 1981 with an annual growth rate higher than the national average (3.32 percent as against 3.1 percent for Pakistan). Moreover, the literacy rate is abysmally low, standing as it does at about 16.7 percent (which according to some is an optimistic estimate).

The inflow of over 3.5 million Afghan refugees and the location of more than three-fourths of this number in the NWFP has compounded the problems with far reaching implications for the economy, environment and the level of off-farm employment. The influx of these refugees with their herds and beasts of burden have tended to encroach on forest lands and led to over-grazing of pastures resulting in environmental degradation. The rapidly multiplying demand for food has led to crops being grown on steep and unstable slopes. Besides these, the strain on the infrastructure has been inormous and competition for the same jobs also affected the overall employment available to the local population especially in the service sectors, where the Afghans have an edge over them by virtue of

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having brought along a large fleet of transport vehicles which ply about without the need of going through some of the formalities for plying them.

The increase in the size of population (local as well as refugees) has had a direct bearing upon the rate of migration in the region. As a result, there has been a large out-migration from the NWFP to the other provinces as compared in-migration, the reasons being the lack of remunerative employment opportunities, pressure of refugees on the available resources, and inability of the agricultural sector to absorb additional numbers. In the sphere of international migration, NWFP is only second to Punjab in the supply of manpower (composed as the majority of out-migrants are of young and able-bodied persons), where out of about 1.7 million persons going abroad about 0.6 million were from the NWFP.

Agriculture and Employment

The province possesses essentially an agriculture based economy but the prevalent farm size, where about 90 percent of the farms are fount in the cohort of under 12.5 acres, falls in the small to very small category of farms. As a result, the benefits of commercial farming with mechanisation and advantages of scale of production are not available to the farmers.

The main agricultural crops grown are wheat, maize, sugarcane, tobacco, fruits and vegetables. However, crop yields per hactare are low. In 1987-88, for example, wheat yields were the lowest and for sugarcane the second lowest in the country. The yield per hactare for tobacco is competitive but since more than 90 percent of the total virginia tobacco in grown in this province, any comparison becomes irrelevant. Moreover, defective cultural practices and the lash back of other developments have led to such problems as flash floods, soil erosions and the twin menaces of salinity and waterlogging taking their toll of fertile soils.

The traditionally operated and managed agriculture sectore has tended to lag behind in supplying output, providing livelihood as well as absorbing labour over time. In fact, the trend has been for the agriculture sector to release labour onto the market (see Table 1). Besides its inability to absorb labour, the agriculture sector tends to generate small incomes (on an average) and is highly susceptible to the vagaries of weather where dry spells or flash floods can wreck havoc on the standing crops. Moreover, the topography of the province makes some areas inaccessible to/unfeasible for modren technology and cultural practices.

Against this setting as described above, stimulating off-farm employment becomes a necessity, not only for improving the lifestyle of the rural people but

¹Source: Census Atlas (1990) 1981.

even for maintaining the present standards of living of all the people in the region.² This is because the declining employment levels presently provided by the agriculture sector affect the majority of the population either directly or indirectly.

Table 1

Distribution of Employed Persons by Agricultural and Non-Agricultural Activities in N.W.F Province

Date Source/Year	Total Employed	Employed in Agriculture	Off-Farm Employmen
Population Censuses			
1951	100.00	69.24	30.76
1961	100.00	67.36	32.64
1972	100.00	60.17	39.83
1981	100.00	62.14	37.86
Labour Force Surveys			
1982-83	100.00	52.63	47.37
1984-85	100.00	56.74	43.26
1985-86	100.00	59.24	40.76
1986-87	100.00	52.21	47.79
1987-88	100.00	51.21	58.79

Source: The Population Census of 1951, 1961, 1972 and 1981, and Labour Force Surveys 1982-83, 1984-85, 1985-86 and 1987-88.

While the data presented in Table 1 show the overall shares of agriculture in absorbing labour, other micro studies conducted now and then throw light on the conditions in specific agricultural zones. For example, Ghayur (1987) has shown only 1/3 of the rural labour force to be engaged in agricultural pursuits in the Barani (rainfed) areas of NWFP. Studies conducted in areas with mountain specificities also show this falling trend, even though the factors causing the trend originate differently.

²Cf. the remark made by Professor Thiesenhusen (1991) that for ameliorating poverty in the third world, one of the method is ".... to pull rural poverty groups into non-farm agro-industrial, urban or international employment". "Have Agricultural Economists Neglected Poverty Issues?", Paper presented at 7th Annual General Meeting of the Pakistan Society of Development Economists, 1991.

II. ASPECTS OF OFF-FARM EMPLOYMENT

Off-farm employment in the NWFP³ and employment in the agriculture sector are in fact inter-linked in that they form the warp and weft of the income of the rural households. Agriculture as practiced by the farmers in the province also includes the raising of livestock and poultry in order to supplement their family incomes, especially during the slack season. Service sectors and agro-based manufacturing have also emerged as important off-farm providers. In some cases, the farmer may be employed in off-farm activities during slack seasons when the demand for labour in the agriculture sector is low. Besides this category of workers there are also those workers (members of rural households) who have moved out of the agriculture sector and are fully occupied in off-farm activities.

In looking at the typology of off-farm employment prevalent in the NWFP, distinction needs to be made between the formal and informal sector although there are data limitation in quantifying the informal sector per se. Using the method of the Census of Manufacturing Industries (CMI) (where industrial units are categorised into registered and unregistered) we use the concept of registered and unregistered synonymously with formal and informal manufacturing sectors.

In the category of manufacturing industries in the province, most of the industries are those based on food, metal, wood processing, furniture, tobacco, leather, etc. which are based on the existing resources of the region. Besides these, there are some large scale industries producing electrical goods, machinery, chemical, taxtiles etc. Basides manufacturing, the other sectors are as reflected in Table 2. These show the importance of the categories in terms of rising and falling levels of employment provided.

The informal sector in fact is a reflection of the dualistic system of production, which seen in the context of off-farm employment in the NWF Province includes a multifaceted group of activities. Alongwith the unregistered small scale urban industry there are also various types of skill/craft based rural cottage industries, all reflecting the region-specific skills.

The informal sector also includes domestic servants, street vendors, carcleaners, restaurant attendants, and the informal transport and food/service sectors.

Gender Participation

Female participation in the informal sector is significant where they work

³In the context of this paper, off-farm employment refers to all activities excluding activities related to the production of agricultural crops.

Table 2

Number of Establishments and their Employment by Major Groups in N.W.F. Province, 1984-85 to 1986-87

(In Number) 1984-85 1985-86 1986-87 No. of Employ-No. of Employ-No. of **Employ** Establish-Establish-Establishment ment ment-Industrial Title Level ments Level ments Level ments Agriculture, Forestry, Hunting 15,500 143 16,488 and Fishing 127 13.135 134 457 Mining and Quarrying 353 463 6 Manufacturing 301 37,542 339 38,363 353 41,501 Electricity, Gas and Water 78 11,988 77 12,911 102 15,545 Construction 72 17,786 70 17,674 71 13,845 Wholesale and Retail Trade, Restaurants and Hotels 25 1,427 27 954 31 1,044 Transport, Storage and Communication 30 34 16,891 39 5,441 17,402 Financing Insurance, Real Estate and Business Services 64 7,115 67 7,606 68 7,939 Community, Social and Personal Services 831 127,862 861 933 146,293 134,922 Activities not Adequately Defined **Total** 1.534 260,514 22,199 1.616 245,788 1,747

Source: 1. Survey Report of Annual Establishment Enquity, 1986-87.

^{2.} Directorate of Manpower and Training, Government of N.W.F.P., Peshawar.

as maids, cooks, seamstresses, and are engaged in handicrafts, embroidery, marketing of milk and poultry alongwith participation in the agriculture sector.

NWFP Specificity for Off-Farm Employment Generation

Besides the sectors already mentioned, tourism is a very important sector for generating off-farm employment in this region. Despite the fact that it is difficult to quantify the off-farm employment generated by tourism directly, its impact is felt in the transport sector where there is an increase in activity with an increase in tourist traffic. The linkage effect is also felt in the hotel and catering sectors which show increase in the employment provided.

Finally, cottage industries in the area of tourist attraction also show increased activity due to ready market at thier doorstep. Thus tourism has a multiplier effect on the other sectors providing off-farm activities.

The other product specific off-farm employment with rising employment generation are activities related to wood based industries, mining and quarrying. Tobacco and sugar industries, alongwith food industries, are also resource based industries.

Road transportation exists both in the formal as well as the informal sector. It gains importance due to the absence of adequate railways network in the area and the geographic terrian of the region which makes communication difficult. The agriculture sector also uses the road transportation extensively, especially for fruits, vegetables and grain movement. This is thus a risng sector of employment with strong forward and backward linkages.

Construction and public works is yet another rising sector where there has been increasing activity due to the remittances sent home by workers in the Middle-East, and which has mostly been invested in this sector. This sector has also shown forward linkages with transportation and backward linkage with cement, bricks and other input supplying-industries and other establishments thus generating employments in these industries also.

III. PRE-REQUISITES FOR THE GENERATION OF OFF-FARM EMPLOYMENT

For the generation of off-farm employment, certain pre-requisites need to exist, or alternatively, certain constraints need to be removed. These pre-requisites are:

- Decrease in the present level of population growth;

- Increase in the level of literacy and skill development of the labourforce to enable them to utilise the technology and improve productivity;
- Socio-economic development of the region with an increase in urbanisation and regional spread of development;
- Investment; and
- Positive and consistent growth policies.

The labour force is the economically active population that is responsible for the production of goods and services. This group includes all persons between 10 or 12 to 65 years of age and may be employed or unemployed; while the employed category constitutes of those self-employed, employers and employee groups who work for wages, pay, profit, payment in kind as well as unpaid workers in income generating enterprises.

Present Rate of Growth in the Population

The changes in the labour force are a function of the size, structure and growth of population (in the absence of migration). In 1951 the population of the province was 4.6 million which in 1961 stood at 5.7 million, in 1972 at 8.4 million and in 1981 at 11.1 million. The annual compound growth rate which was 2.34 during the 1951-61 intercensal period rose to about 3.32 in 1961-72 and maintained the tempo during 1972-81. The NWFP which has about 9.4 percent of the total area contains over 13 percent of the total population.

This accelerating and exploding rate of population growth takes place mainly in the rural areas where between 85–88 percent of the population lives. Against the rural scene, the rate of urbanisation in NWFP is the lowest in the country and stands at 15.1 percent which is even lower than that of Balochistan.

The sex ratios show about 110 males to 100 females. The dependency ratio is also high, while the density of population is 148 against 138 persons for Pakistan.

Level of Literacy and Skill Development

The level of literacy is very low and stands at a little over 16 percent which again is an optimistic estimate. There has not been much skill development and hence the inability of the labour force to handle advanced and sophisticated technology. If productivity of labour is seen through the wage rate, the Pakistan Economic Survey, 1990, shows Frontier to have the lowest wage rates for carpenters, masons as well as unskilled labour.

In order to make off-farm employment a viable proposition the productivity of labour must be raised so that labour can be made more mobile. However, some institutions like the Pak-German Woodworks and Pak-Holland Metals have contributed towards the dissemination of technology and skills in these fields but the overall labour force is still lagging behind in any improvement of their productivity and skills.

Socio-economic Development of the Region

The backwardness of the region is reflected through the socio-economic indicators like literacy, per capita consumption of electricity, fertilizers, level of urbanisation, railways and roads available, health facilities, drinking water etc. The provision of infrastructure is essential for the development of the region and inprovement in the literacy and other indicators.

All these show a picture of backwardness. Added to this is the lack of spatial spread of these facilities as well as employment facilities. Most of the industries are concentrated in a few areas (Peshawar, Swat, Abbottabad and Mardan). There is an urgent need for an even spread of industries and all other facilities especially when most of the population lives in the rural areas.

Investment

Investment plays a major role in the generation of economic activities as well as employment. But the NWFP suffers due to the reluctance of entrepreneurs to locate the industries here, due to the absence of infrastructure, skilled labour and market. Those that do locate again get established in the urban areas. The industrial estates do provide infrastructure but these again have greater concentration in a few areas like Peshawar, Hazara, etc. Even the remittances that come from abroad are not invested for the industrial or HRD purposes but are spent on real estates or building or houses, on marriages or other consumption of durable goods.

The NWFP is thus unable to attract and retain investments which is a major drawback and acts as a constraint in the development of the province as well as in generating off-farm employment activities.

Positive and Consistent Government Policies at the Macro Level

The industrial policies pursued by the government have a direct bearing on the development of the region as also do the fiscal, monetary and commercial policies. The development of industrial estates and SIDB have contributed greatly in the provision of infrastructure and skill development. However the important aspect of all government policies is the need for consistency which is not always visible, and without this aspect there can be no sustained development. The incentives which were provided to Gadoon Amazai Industrial Estate is a case in point where inconsistency in government policies has done more harm than good to the industrialists who had located here.

For off-farm employment to be a viable proposition, a combination of all the factors above mentioned are needed to work simultaneously. The absence of any of them will work against the creation/generation of off-farm employment. This is obvious from the fact that 63 percent of the ruturn migrants with skill could not use their skill due to the unemployment problems in the country.

CONCLUSIONS

There is an urgent need for off-farm employment in the NWFP where the agriculture sector, though the major sector of the economy is unable to sustain the labour employed there. Moreover the population pressure, influx of refugees and prevalent cultural practices in its agriculture have had a negative impact on the environment which is already fragile. The socio-economic indicators further reveal the backwardness of the region and the inability of the economy to absorb the labour released by the agricultural sector.

Off-farm employment thus becomes a necessity. The prevalent off-farm employments are mostly resource-based like wood and wood-based industries and activities, mineral based activities, tourism, construction and the service sectors and the cottage and household industries using region-specific skills.

However in order to make off-farm employment a viable proposition certain constraints must be removed like checking the rapid growth of population, transformation of the labour force, additional investment and consistent government policies. Unless these four factors are handled simultaneously, there can be no positive impact on the lives of the people and on their income earning capacity.

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Comments on

"Agriculture Sector Employment and the Need for Off-Farm Employment in the North-West Frontier Province"

As we are all aware, the problem of employment is becomeing a cause of serious concern among economists and policy-makers. This concern assumes even more serious dimensions as every year a very large and substantial number of people are entering the labour force. Thus, if economic development is our goal one has to productivity employ both human and capital resources to attain a significant and marked improvement in living standards.

The paper, by Zia, thus looks at the important issue of agriculture sector employment and the need for off-farm employment in the Frontier province. The author has divided the paper into the three parts – the first examines the provincial economy with particular emphasis on the resources available. The second part of the paper highlights the various types of non-farm activities in the province while the last part of the paper lists the basic conditions which are required to bring about an increase in off-farm activity and therby increasing employment opportunities. In addition the text of the paper has numerous tables which supplement the discussion.

The picture depicted by the author is not a very encouraging one. Agriculture and industry do not provide much scope, in the existing scheme of things, to increase employment opportunities – agriculture because of the size factor – a large number of the farms being less than 12.5 acres in size and industry because of the lack of infrastructure and government policies that are far from consistent, a recent example is that of Gadoon Amazai. However, two potential employment intensive industries that have been indentified by the author include the tourist industry and the small scale or cottage industry.

Thus, what emerges from the paper is that given the limited resouces – the position being further aggravated by the repercussions of the Afghan conflict – the provision of off-farm employment is important if the problem of employment is to be tackled effectively. For this to be carried out, certain steps have to be taken which, as stated by the author include the following:

- reduction in population growth;
- the raising of literary levels;
- raising investment levels; and
- consistent govt. policies.

The measures that have been suggested appear to me to be of a long-run nature. Take for example, the reduction in population growth. Much has been spent in the past several decades to reduce population growth but to no discernible effect. Also the issue is sensitive from a religious point of view. Similarly, literacy levels have not improved either. Pakistan as a whole is still in the bottom league in the South Asian region with respect to literacy attainment levels. Frequent changes in government policies send out mixed signals to investors and others with the net result that overall development suffers.

What is needed are immediate policies that encourage and stimulate the provincial economy. For this a prerequisite is the identification of projects that are labour-intensive and these projects can largely be found in the small-scale or cottage industry. This industry should be given the necessary financial incentives for successful development. The basic idea here is to identify those projects that can give-to borrow terminology from international trade – comparative advantage in production.

This is purely an economic suggestion. To come to the political side it is important to note that politics and economics are becoming increasingly intertwined, so much so that political economy is making a strong comeback. Thus, no matter how sound one's economic policies may be if they do not have the required political support or the political will, they will not succeed. Thus, it is necessary that political conditions need to be favourable and that a political concordat be established at all levels to implement economic policies. One cannot overemphasize the point that political stability is an important ingredient that contributes to the process of economic development.

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