

## LINKAGES OF OFF-FARM EMPLOYMENT ACTIVITIES

### OFEA and the Demand for Labour

The labour demand profile reveals that the demand for labour in the informal sector is at its peak during the Spring to Autumn Seasons, i.e., April to October. Although unpaid, full-time family labour is commonly used, especially in the smaller landholding groups, daily wage labour in farm production processes is also an important OFEA.

Wage labour is used in the production of agricultural crops and the highest demand for wage labour comes during the sowing and harvesting times for maize, which is the major crop. This thus coincides with the plantation season in June-July and the harvest in October. Wage labour is also used during October and then during the harvest time for wheat. However, wheat is not a major crop in these villages, nor for that matter is rice. Vegetables are grown here. However, cultivation is taken care of by family labour.

- o Livestock rearing also uses labour but an insignificant amount of wage labour. It is basically based on family labour. Labour in these activities is used from April to October.
- o Labour is used for construction and other related activities which are also undertaken during the summer months.
- o Wage labour involved in afforestation activities, timber harvesting, and logging, is a major source of OFEA.
- o From November to March, most labour-related activities come to a standstill because of snowfall. During this time, labour tends to go to neighbouring areas and then to return in April.
- o Agropastoral activities employ family labour (unpaid) and are conducted during June to November.

According to informed estimates, these villages employ about 500 wage labourers during the year (on all activities together), but only for part of the year, since all labour-related activities are seasonal in nature. There is considerable input of unpaid family labour, especially in the production of subsistence crops and the rearing and tending of livestock when the activity time coincides with the availability of family labour. There is also a certain degree of division of labour within the family. Females contribute towards livestock labour and thus release male labour for crop production. Horticulture is not an important activity at the moment, although it has considerable potential for the future.

Subsistence activities in their sequence include the following for the major crop (maize):

- preparation of land,
- sowing,

- weeding,
- use of fertilizer/pesticides, and
- harvesting.

Livestock activities include the following:

- feeding animals,
- watering,
- cleaning of sheds,
- taking animals to the grazing areas, and
- milking.

Apart from taking the animals out to the grazing grounds, the rest of the activities are undertaken by women and children. They thus resolve the conflicting claims on male family labour since all activities in the area have the same time frame.

### *Gender Involvement*

Women perform all household activities such as cooking, cleaning, and looking after the children. In addition they help to rear livestock (poultry); to market milk, eggs, and poultry; and in some aspects of crop processing (cleaning of maize) as well as production (Table 17). In Lilownai women are also seen to be working outside the household.

Thus, OFEA at the household level coordinate the time of all the individuals in income earning activities. Unfortunately, however, being unpaid labour, they are invisible and although OFEA enhance their economic contribution to the income of the household, they neither lead to any acquisition of or increase in skills, nor do they give them any decision-making powers that can be attributed to their participation in OFEA.

### **Linkages with Forests**

Forests are the major sector for the OFEA undertaken at present. They also have further potential that can be developed.

The income from timber, at a rate of 60 per cent, is given to shareholders by the Government through the revenue department. Besides this source of income from the forests, the community also leases out the forest for grazing purposes to the *Gujars* and charges a fee for it. Forest-related activities such as harvesting, nursery afforestation, and sawing all require labour and thus provide OFEA. During the summer and autumn months most agricultural labour (unskilled) is involved in these activities.

During the winter months, skilled labourers, along with the *Gujars* and some of the local labour, are involved in activities such as digging pits and trenches, thinning trees, and constructing checkdams, forest dams, and buildings. However, there is a shortage of labour for activities like tree felling and sawing since the local labourers are not skilled enough and hence labour is imported from Swat-Kohistan, Kalam, and Azad Kashmir and *Gujar* labour is also used. The wages for skilled labourers are between Rs 50 to 60 per day while for unskilled labourers they are between Rs 25 to 35 per day.

- OFEA related to mushroom gathering are also undertaken in the forests. The mushrooms are then sold in Mingora and further transported to Pindi and Islamabad. Medicinal plants are also collected. Other forest products include walnut bark (locally called *Dandasa*),

which are in demand in Peshawar and Rawalpindi, and *Chir* Bark which is used for curing skins/pelts.

- Yet another important source of income for local people is sawn timber which is in demand in the adjoining villages and is also needed by government departments such as Union Councils, and District Councils. There is a market/sale point for timber at Chakdara where the people from the Alpuri Forest Region sell the timber they obtain at concessional rates, supposedly for their own use, and thus earn more income by misusing their rights.

Thus, although the total employment generated for the local population is restricted by their lack of skills in forest-related techniques, the income earned from forest-related, off-farm activities is significant and may reach Rs 170,000 (excluding wage labour which is paid either at Rs 35 per day for unskilled and Rs. 60 for skilled labour).

All these activities are linked to the resource base which can be generated through afforestation. However, the locals, as well as the *Gujars* (who pay a fee to the locals), overgraze their animals, adversely affecting the resource base. In the case of oak, which is almost scrub now, the regenerating seedlings are often trampled by the animals, especially around grazing camps. Where the locals have the right to lop and cut grass (for winter feed for animals) they often also cut the *Chir* and *Kail* saplings, either accidentally or deliberately, to clear the space for grass.

- The resinous wood at the butt of the mature *Chir* Pine and Blue Pine is extracted/chopped off by the villagers for fire lighting. This practice weakens the trees and they cannot stand up to the weather.
- The felling of trees and clearing of forests for timber and habitation have also endangered the forest resources.
- Finally, encroachment on forest land, where clearing of forests especially from slopes have resulted in barren slopes and rocks (where the top soil has been washed away with the removal of vegetation), and forest fires have led to depletion of forest resources at the hands of the villagers. Often fires are not accidental but deliberately started to improve the growth of grass for the livestock and cattle.

Thus OFEA are closely related to the resource base. As such, an even balance is required for the sustained use of this resource without adversely harming the environment and the very base that nurtures and maintains it.

### Linkages with Government Policies

All forest-related activities are directly related to and derived from government rules and regulations. After the merger of the Swat State with Pakistan the Government maintained some of the old policies and added some new ones.

The rights of the villagers to free use of the forests (already mentioned) have been maintained. Besides these the payment for timber resources, at a ratio of 60:40, between the people and the Government is also a result of government policy.

In the process of felling trees for sale there are also policy rules and procedures whereby the trees indicated for felling are marked by the Forest Department, and the list is handed over to the Forest Development Corporation who then fell them and dispose of them in Chakdara.

There are also rules governing the types of tree that are to be felled and the ratio of the trees marked for felling. Government rules require certain areas to be closed for timber cutting by the local population when the regeneration process is endangered, but their rights to use forest products during those times remain.

Government guidelines for the auctioning and use of forest resources by the locals have to ensure a balance so that the essential requirements of the people for timber, firewood, and grazing are met without causing depletion (through afforestation measures).

The policies also aim to ensure sustained income for the concessionaires and the State along with the development of wildlife and scenic beauty for public use. Thus all activities related to forests are governed and regulated by government policies.

### **Infrastructural Linkages**

Lack of infrastructure leads to additional constraints even for the functioning of the forest department. Due to absence of roads, timber is transported from the forest by human and animal labour. Slides are also constructed to bring timber to the roadside. The Forest Development Corporation has constructed logging roads in Lilownai and Kara. There is a metalled road at Alpuri and Shahpur which is used for timber movement. Absence of roads, skilled labour, and distance from the road are all major components in the cost of exploiting timber for sale.

### *Extension and Support*

Lack of credit institutions and training centres for enhancing the skills of the labour force, along with the absence of other physical and social infrastructures, all contribute towards the lack of OFEA opportunities in this area. Positive policy responses by the Government in these spheres are a sine qua non for future action.

### **Livestock Linkages**

Rearing and looking after livestock and poultry are important income substitution/income generation activities in this area. The rearing of animals is related to the resource base. Forests and the natural flora provide them with feed and encourage farmers to maintain livestock. For winter feed, the grass that is cut from the forests is used as fodder.

Although a Livestock Department exists in the Government and operates at the district level, its activities are not visible in these areas and all livestock-related activities are undertaken in isolation of any government policies. Such policies and their physical implementation are necessary to provide incentives for the development of the livestock sector and the improvement of the stock. So also are other infrastructural facilities to sustain these activities. One very important area of government intervention is the provision of improved grasses which will be high yielders and will better endure the climatic conditions.

Another important area is the need for improvement of stock through artificial insemination and cross-breeding methods since the isolated nature of the area precludes any type of cross breeding without intervention. The need for protection against animal diseases is also felt.

Besides the linkages with the resource base, the livestock activities contribute to income, employ labour, and show scope for improvement through interventions.

### **Linkages with Minerals**

The mineral sector is yet another area where OFEA can be generated. There are some minerals that have been identified in the area. Among them are marble, barites, lead, and other metallic and non-metallic minerals. However the reserves/quantities are not known and further investigation is required to assess the potential. Presently, quarrying for marble has been undertaken, providing employment to wage labour.

It is expected that further government intervention in the mineral sector, which is resource based, will lead to income and employment generation, income increase, and skill development since some form of technology will be required for exploration and exploitation. The linkage with technology and skill development becomes prominent since, without adequate provision of these variables, OFEA in this sector may not be a viable proposition in the long run.

Marketing will also be essential. This sector is expected to provide backward and forward linkages with activities like processing, transportation, and marketing. Nevertheless care needs to be taken since overexploitation may lead to depletion of the non-renewable resource base.

### **Impact on Migration/Population Distribution**

OFEA normally help in the improved distribution of population in terms of available resources. The existence of resources tends to generate employment activities and the absence of resources tends to push the population into areas where there is economic activity. In the context of the project area, even those resources that exist, such as forests and minerals, are constrained in the amount of OFEA that they can generate.

Moreover, besides the migration that takes place out of the district and the province to other provinces and the Middle-East, the out-migration of the inhabitants in the project area is due to the seasonal nature of the activities and to the absence of any permanent all year round economic activity. As a result, OFEA do not affect the population distribution as such, but their absence from the area leads to permanent as well as seasonal migration when the latter could be prevented by providing people with OFEA close to home.

### **OFEA and Their Contribution to the Growth of Markets and Institutions**

The major OFEA are related to the use of forests (for home consumption) and employment in the formal sector (government) and the informal sector (private business and wage labour). These activities do not need the presence of a market for inputs and outputs. Besides these, the absence of any kind of processing or value-added activities, a poor transport/communication system, the depressed socioeconomic condition of the people, and the prevailing trade (which is not cash based) system do not contribute towards the creation of demand for markets and related institutions.

## **Impact on Agricultural Productivity**

The agricultural productivity of these villages varies greatly even within the villages and in no area does it appear satisfactory. The prevalent OFEA do not influence productivity positively. In fact there is almost no connection between OFEA and agricultural productivity nor do they lead to any form of agricultural specialisation and diversification. On the one hand, the climate and terrain/topography and lack of water, services, inputs, and implements hamper farm production and restrict it to just one major crop, while, on the other hand, the OFEA in vogue do not in any way contribute to improving this situation.

## **Linkages with the Farming System**

OFEA do complement the farming system which concentrates on the livestock and poultry sector. Such a linkage can be seen where fodder/crop residuals are used to feed animals. Otherwise, there are no forward or backward linkages, because OFEA are neither agriculture-based nor do they create any form of utility (place, time, or form) to agriculture. However, OFEA are involved in post-harvest activities that are mainly carried out by the women of the household (unpaid labour).

## **OFEA and Employment**

OFEA are responsible for the generation of some employment in the area, both permanent and seasonal. Permanent employment is in government jobs, including clerks, teachers and officer cadres, private businesses, shopkeepers, and self employed (paramedical, lawyers, doctors, and pottery makers), while seasonal employment is mainly for labour employed in forestry, agro-related activities, construction, quarrying, and service sectors.

However, the extant OFEA do not in any way lead to improvement in the skills of the labour force or the population nor are the OFEA capable of generating local initiative in any major production lines or entrepreneurship. This is due to resource, infrastructure, and skill constraints. Mobilisation of local resources would need organisation, coordination, initiative, and community participation and these are not encouraged by the prevalent OFEA.

## **Impact of OFEA on Income Distribution**

OFEA do contribute to some extent towards income acquisition and thus dispersion. This is most relevant for landless farmers and the very small landholding groups (up to 5 acres), who are earning from Rs 15,000 per annum to Rs 75,000 or more (found in the very small farmers' category). In fact OFEA have put income into the hands of individuals throughout all the different landholding categories, but the greatest needs are those of the landless and very small farmers. It is here that OFEA have helped income distribution making income available to the needy. Moreover distribution of royalties from the forests also circulates income among the inhabitants. In addition, there is income resulting from OFEA in forestry (through employment of wage labour in afforestation).