

## **Flexible Division of Labour on Family Farms in Northern Pakistan**

- A Report -

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This paper is a short version of a report on the sex-specific division of labour on the family farms of the village of Battakundi (North Pakistan). This study was carried out on behalf of the GTZ in 1987/88. At that time the GTZ was implementing the "Pakistan-German Seed Potato Programme" in the area under investigation and promoting the cultivation of cabbage as a cash crop, too. The number of the cabbage producing farm families and their scale of production have, however, been relatively small. In the meantime, cauliflower and peas have mostly replaced the cultivation of cabbage as a cash crop. But other additional activities, especially women-oriented development measures, have not been carried out. No fundamental modifications regarding the sex-specific division of labour have, therefore, taken place on the village level of Battakundi since the collection of the empirical data.

### **1. General Characteristics of the Area of Investigation**

Battakundi, the area of investigation, lies at a height of around 8900 ft. in the north of Pakistan, in the North-Western-Frontier-Province, at the northern end of the Kaghan Valley. The Kaghan Valley stretches slightly more than 88 miles in a north-southerly direction and is marked by Battakundi in the north and Balakot in the south. Due to bad road conditions, the journey from Balakot to Battakundi, which is about 62 miles, takes around 6-7 hours by jeep. Moreover, the road between Balakot and Naran, which is 9 miles south of Battakundi, is only accessible by jeep.

Roughly 350-400 - exclusively Moslem - families make Battakundi and other northerly regions their homes in summer. The majority of these families spend the cold period of the year (between November and April) in the lower lying villages around Balakot.

The main source of income for the people living in Battakundi is agriculture. Potatoes have been cultivated for roughly the last 20 years, almost as monoculture. Because of this, the quality of the potatoes in this area has deteriorated. Furthermore, the price of potatoes has decreased considerably on

the national market. Due to the unilateral dependence of Battakundi's farmers on this crop, the income of numerous families has declined strongly and, as a consequence, the indebtedness of these farmers has increased considerably.

From the agricultural point of view, this situation necessitates the introduction of crop-rotation in order to improve or at least uphold the soil condition. From the economic point of view a change in the production structure of these family farms in order to make new sources of additional income accessible, seems indispensable.

It can be assumed, however, that with the introduction of crop-rotation and access to new sources of income, the labour input into the agricultural family farms of the valley will also have to be changed. Therefore, for adequate developmental measures, knowledge of actual labour input as well as of the division of labour within the family farms is absolutely necessary.

## **2. Task Setting and Methodology**

In a family farm, in contrast to a non-family farm, all the members of the family, i.e. men, women and children are integrated into the production process.

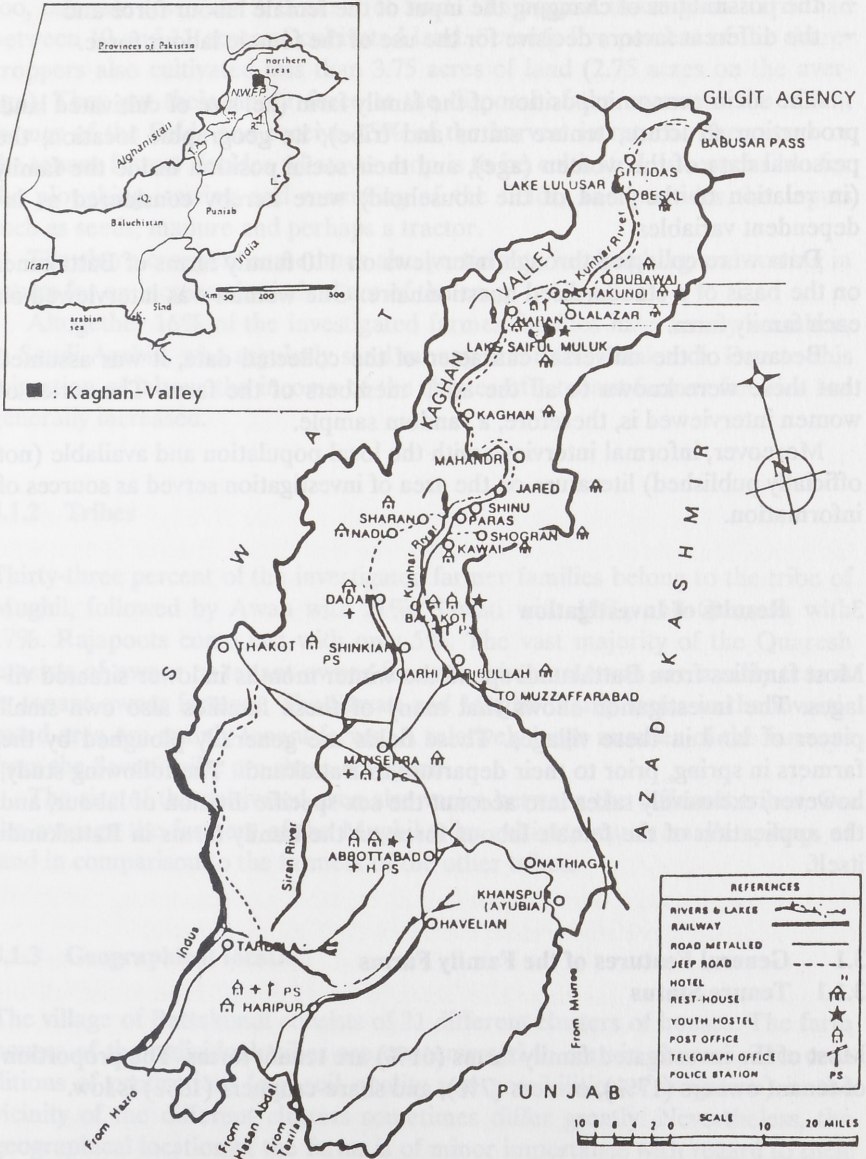
The use of this labour force is determined by different social and economic factors. These factors, such as religion, endowment of resources and methods of production, are assumed to vary in the individual areas and also in the individual villages, i.e. they are marked by the respective region and locality. The quantitative labour input (number of working hours, distribution of working hours over the year), the qualitative labour input (individual activities) and the sex-specific division of labour will therefore likewise vary in particular regions and villages, i.e. they are also marked by the respective region and locality.

Developmental measures aimed at changing the production structure of the family farms in Battakundi as elsewhere, and at tracing additional sources of income must, therefore, take into account the integration of female labour into the production process on the farms, and must be adapted to the specific conditions of Battakundi.

The present investigation aimed mainly at obtaining information regarding:



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- the sex-specific division of labour on the family farms of Battakundi,<sup>1</sup>
- the quantitative labour input of the female labour force,
- the possibilities of changing the input of the female labour force and
- the different factors decisive for the use of the female labour force.

The socio-economic position of the family farm (i.e. size of cultivated land, production structure, tenure status and tribe), its geographic location, the personal data of the women (age), and their social position inside the family (in relation to the head of the household) were hereby considered as independent variables.

Data were collected through interviews on 110 family farms of Battakundi on the basis of a standardised questionnaire. One woman was interviewed on each family farm.

Because of the universal character of the collected data, it was assumed that these were known to all the adult members of the farm. The series of women interviewed is, therefore, a random sample.

Moreover, informal interviews with the local population and available (not officially published) literature on the area of investigation served as sources of information.

### 3. Results of Investigation

Most families from Battakundi spend the winter months in lower situated villages. The investigation shows that many of these families also own small pieces of land in these villages. These fields are generally ploughed by the farmers in spring, prior to their departure to Battakundi. The following study, however, exclusively takes into account the sex-specific division of labour, and the application of the female labour force on the family farms in Battakundi itself.

#### 3.1 General Features of the Family Farms

##### 3.1.1 Tenure Status

Most of the investigated family farms (61%) are tenant farms. The proportion of tenant owners (17%), owners (7%), and share-croppers (15%) is low.

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1 The use of child labour was not taken into consideration within the framework of this investigation.



The fields of the tenant farmers are relatively small; 80% cultivate less than 30 kanal<sup>2</sup>, i.e. 3.75 acres. 78% and 71% of the tenant owners and owners, too, cultivate less than 3.75 acres of land. The biggest investigated farm had between 10 and 11 acres of cultivated land. Seventy-five percent of the share-croppers also cultivated less than 3.75 acres of land (2.75 acres on the average). They put their labour force at the disposal of the owner or the tenant farmer of the fields and receive 25% of the harvest in return. The owner or the tenant farmer decides whatever crop is to be cultivated, is responsible for the ploughing, sowing and manuring of the fields, and provides the inputs such as seeds, manure and perhaps a tractor.

The share-croppers sometimes also participate in ploughing and sowing in return for an increase in their share of the crop.

Altogether 16% of the investigated farmer families have family members in Saudi Arabia, who regularly send money home to Battakundi. Due to this migration of labour the income of the (better-off) tenant farmer families has generally increased.

### 3.1.2 Tribes

Thirty-three percent of the investigated farmer families belong to the tribe of Mughil, followed by Awan with 21%, Sawati with 19%, and Quaresh with 17%. Rajapoots come last with only 5%. The vast majority of the Quaresh consists of owner or tenant-owner farmers, whereas Awan are mainly tenant or tenant-owner farmers. The Sawati and Mughil family farms in the investigated area are mainly tenant farms. A relatively large number of the farmers from the Sawati tribe are share-croppers.

The size of the cultivated area also varies between the different tribes. On the average the farmers of the Mughil tribe cultivate much smaller pieces of land in comparison to the farmers of the other tribes.

### 3.1.3 Geographical location

The village of Battakundi consists of 21 different clusters of houses. The farm houses of the individual tribes are concentrated in certain clusters. The conditions of production, (e.g. soil quality and possibilities of irrigation) in the vicinity of the different clusters sometimes differ greatly. Nevertheless, the geographical location of the farms is of minor importance with regard to their

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2 1 Kanal = 0.125 acre.

economic situation, as almost every family disposes of two to four houses in the different parts of Battakundi: in the vicinity of the river, on the slopes, and in the higher situated areas. Due to their differing location, the beginning of cultivation and the time of harvest in these areas also vary. The families transitionally live in the house closest to the area being cultivated. At the time of harvest the whole family again moves to the corresponding houses.

### 3.1.4 Production Structure

Potato is the cash crop produced on all the investigated farms. It is followed by maize, with 57% of the farmers producing it exclusively for their own consumption. Most maize-growing farms are large and generally belong to tenants and owners. The share of the maize-producing farmers in the individual tribes in Battakundi is between 62% and 83%; except in the Mughil tribe, where maize cultivation is of minor importance, its being produced by only 33% of the farmers.

Vegetable production on the fields is not very widespread in the area (26% of the investigated farms). It is relatively popular on large farms and on the farms of Quareh. 20% of the farms with less than 3.75 acres of cultivated land plant vegetables on their fields, against 48% of the farms with more than 3.75 acres. In contrast, only on two share-cropper farms were vegetables produced for the market.

Vegetable production for home consumption in kitchen gardens is, however, very common, with 71% of the farmer families practising it. Not such a high percentage of share-croppers or farmers cultivating a very small area has a vegetable garden; of the family farms with less than 1.25 acres of cultivated land, only 57% have one. Share-croppers wishing to plant a vegetable garden must have permission from their landlords. Many share-croppers, therefore, produce vegetables for home consumption on the edges of the fields, between the rows of the crops. The distribution of vegetable gardens among the family farms is, however, relatively independent of their tribal affiliation.

Most of the farmers (91%) keep cattle and buffaloes, though only 78% of the smallest farms (less than 1.25 acres of land) do so. In contrast, all the share-croppers own cattle, these being their only possession. Cows, which are cheaper, are more popular than milk-buffaloes. Of the investigated farms, 80% keep cows, whereas only 41% keep milk-buffaloes.

The number of these animals, producing milk exclusively for home consumption, is low on the individual farms. 83% of the farms have only one or two cows. Other animals such as asses, horses, mules, sheep or goats were



owned by only 40% of the investigated farms. Chicken, in contrast, are very common; 81% of the families kept them.

The number of hens varied in 65% of the cases between one and three. Only 6.5% of the farmers had 8 or more hens. Cattle, buffaloes and chicken were less popular with the farmers of the Mughil tribe than with the other tribes.

## **3.2 Division of Labour**

Only one (45% of the farms) or two women (28% of the farms) of working age live on the majority of the farms. On most of the share-cropping farms (88%) just one such woman is to be found. The distribution of the different activities in relation to the position of the individual women to the head of the household (wife, daughter-in-law, etc.) could, therefore, not be investigated.

Tending the animals and caring for the household are the women's daily tasks, whereas their labour in field cultivation and in the kitchen garden is irregular, occasional.

Within the scope of this investigation it was, however, impossible to ascertain the labour input by the women in the individual activities. Detailed studies on the working hours would have been necessary for this purpose. However, the results show that the quantitative labour input of the individual woman tends to be highest on small and share-cropping farms.

### **3.2.1 Field Cultivation**

The decision about the type of crops to be produced and ploughing are the tasks of the male members of the family. However, it was found that in 10 farmer families the women, too, were integrated in this decision-making process.

The selling of potatoes and vegetables is also carried out by the men. The potatoes, packed in gunny-bags are bought and collected directly from the fields by the shop keepers, who then resell them.

Men and women are employed simultaneously in field cultivation. However, this does not mean that they are employed without any difference. There is a preference visible in all tribes to employ female labour near to the house and not in the fields. Therefore, first the available male labour forces are employed.

### 3.2.1.1 Potato Cultivation

In Battakundi all the activities related to potato cultivation, with the exception of ploughing, are also performed by women. They are mainly employed for cutting the seed-potatoes (in 79% of the farms) and for manuring the fields (in 65% of the farms). Cutting the seed-potatoes is the only task that can be carried out near the house. In Battakundi, manuring is regarded as a socially very low-grade activity and is assumed to be primarily the task of women. Further activities where female labour is important, are the planting of seed-potatoes (53%), and harvesting (49% of the farms).

The quantitative and qualitative labour input of the women is, however, strongly influenced by the size of the individual farm: female members of families with small farms are employed most often.

Weeding, hoeing and irrigation are almost always performed by the women of small farms (less than 1.25 acres) and of share-cropping farms. Cutting and planting of seed-potatoes is the task of the landlord.

When employed for these activities, share-croppers have to be paid in addition to their 25% share of the crop; the women of share-cropping farms are, however, very often used for these activities. On 81% and 50% of the share-cropping farms, respectively, the women work in cutting and planting of potatoes, whereas on the large farms, women take part in cutting of seed-potatoes only.

The female labour-force of the Mughil and Awan tribes is employed significantly more often than among the other tribes, particularly in activities such as cutting and planting of the seed-potatoes and during harvest.

### 3.2.1.2 Maize Cultivation

Maize is produced on 57% of the farms and exclusively for home-consumption. Women are employed in all aspects of maize production other than ploughing, sowing and threshing. They predominantly participate in cleaning and mixing of the seeds<sup>3</sup> (61% of the farms), manuring (62% of the farms), and peeling of the cobs (69% of the farms), not so often in harvesting (43% of the farms). Irrigation, weeding and hoeing are relatively seldom done by women.

Cleaning and mixing of seeds as well as peeling of cobs prior to threshing are considered to be primarily the task of women. These activities can be performed close to the house.

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3 Maize is traditionally cultivated together with beans.



In the maize production, too, the women from small farms are most often engaged. Overall participation of women in maize production is, however, lower than in potato production.

Only two of the investigated share-cropping farms produced maize. A reliable estimation of the use of female labour on such farms was, therefore, not possible. No fundamental differences could be ascertained regarding the use of the female labour force between the individual tribes or between and owner farms.

### **3.2.1.3 Cabbage Cultivation**

Cabbage has only been cultivated in Battakundi as a field crop as well as in home gardens within the past few years. Therefore, cabbage-growing is still of an experimental character, i.e. few farmers produce it and the area under cultivation is very small. Because of this, only uncertain assertions regarding the use of the female labour force are possible.

In this investigation, only 24 farms producing cabbage as a field crop could be recognized. Women are employed for all the activities - cultivation and planting of seedlings, irrigation, weeding, hoeing and harvesting - except for land-preparation. However, the overall use of the female labour force is low, women being mainly engaged in planting seedlings (in 50% of the cabbage-cultivating farms).

Cabbage is cultivated almost exclusively by tenant and owner farmers. Regarding the use of female labour, however, there were no important differences dependent on tenure status or tribal affinity. The Sawati tribe, however, did not use the female labour force at all for cabbage cultivation.

### **3.2.2 Kitchen Garden (Vegetable Cultivation)**

The vegetable garden is generally found in the near vicinity of the house. The cultivation of the kitchen garden is the task of the women, independent of the size of the farm, as well as of the tenure status and the tribal affinity. Generally, the decisions about vegetable cultivation in the kitchen garden are also made by the women.

Two local vegetables, "leach" and "jini", as well as beans and turnips are mainly produced. Sometimes, often on an experimental basis, radish, tomatoes, spinach, clover, carrots, peas, onions, garlic, and also cabbage are cultivated. The production is exclusively for home consumption. 57% of the

investigated farms, however, indicated that the quantity of vegetables produced did not meet the family needs.

The seeds for the vegetable gardens are produced in part by the women themselves; partly they are bought in the market. As the women in Battakundi on principle do not go to the bazaar, they have to ask the men to fetch the seeds for them. The cabbage seedlings, however, are supplied to the women by the extension service of the "Pakistan German Seed Potato Programme" in Battakundi.

The traditional hoe is used for tilling the land. The dung of cattle and buffaloes is used for manuring. Sometimes chemical fertilizers and pesticides are applied in the cabbage cultivation, though the pesticides are mostly looked upon with strong reservations.

Eighty-four percent of the women questioned showed a great interest in training-courses, especially regarding the cultivation of vegetable in kitchen gardens and as a field crop. The interest was, however, subject to the precondition that the courses be held in keeping with the local customs, i.e., by women.

### 3.2.3 Animal Production

As has already been described, the investigated family farms own mainly cattle, buffaloes, and hens. The animals are kept extensively and animal products, especially milk, eggs, ghee and, when available, also meat, are exclusively intended for home-consumption. In contrast to the cultivation of the fields and of the kitchen garden, the women are employed daily and regularly in animal production.

Independent of the animal species kept almost only women are employed in grass-cutting, feeding, milking, and cleaning of the stalls. This is also independent of the size of the land cultivated, of the tenure status as well as of the tribal affinity.

Only the daily chopping of the feed for cattle and buffaloes is also done by the men.<sup>4</sup> The use of male labour in grass-cutting, however, is relatively low. Buffaloes, cows and other animals are mainly tended by children. Only seven farms employed women for this purpose.

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<sup>4</sup> The use of the labour force in the cutting of grass for hay-making was not investigated in detail.



### **3.2.4 Household**

Almost all the household activities, e.g., fetching water, production of different durable and non-durable consumer goods, washing and cleaning, are the exclusive domain of women. This is independent of the size of the family farm, of the tenure status as well as of tribal affinity.

Fetching provisions from the bazaar is, however, the task of the men. Women do not go to the bazaar on principle.

Though collecting firewood is done by women too, it is more often the task of men - especially on the large farms. In 96% of the farms with more than 3.75 acres of cultivated land, men collect the firewood.

Warm meals are prepared three times a day by the women in all of the investigated farms. Vegetables from the kitchen garden as well as wild-growing vegetables, which are collected by the women, are used. Both types of vegetables are also dried and stored for the cold period of the year.

In most of the families (66%), "ghee" was prepared regularly, i.e. about every ten days during the period of investigation.

Fetching water is a highly labour-intensive activity. Only 21% of the investigated families dispose of a nearby source of water. One round trip for fetching water means more than 20 minutes for 41% of the families.

In Battakundi (almost) no use of external paid labour is made for the household activities. However, female relatives help each other whenever necessary without payment.

Women embroider in 42% and knit in 30% of the investigated farms. However, only a small number of women (10) sew. Sewing against payment is done for relatives in a few cases. Women knit and sew especially on the farms with less than 3.75 acres of cultivated land.

Besides, it became obvious through the questioning that most of the women were informed about the (financial) situation and the technical problems of production on the family farms. Local problems of a more universal nature, such as deficient health-care, were also mentioned. Highly striking was the great readiness of the women to actively participate in the process of improving the prevailing situation in Battakundi.

## **4. Summary and Conclusions**

As was shown, the sex-specific division of labour in the above-mentioned activities is rigid, inflexible; either the male or the female labour force is used for

one particular activity, independent of the socio-economic characteristics of the individual family farm and the personal data of the women living there.

The decisions regarding the production of potato, maize and cabbage as field-crop, ploughing, sowing and threshing of maize, marketing of potatoes and cabbage, as well as purchasing in the bazaar are the tasks of men. The decisions concerning vegetable production for home-consumption, cultivating the kitchen garden, collecting wild vegetables, feeding and milking the animals, cleaning the stalls, fetching water, the production of durable and non-durable consumer goods in the household as well as washing and cleaning are the tasks of women.

All the goods produced by the women independently, ghee, vegetables, pullovers, etc., are intended for home-consumption. The women are excluded from the decision-making process regarding the cultivation and marketing of cash crops, and from shopping in the bazaar. Nor do women take on paid employment outside their own farms.

In the remaining activities of field cultivation, collecting firewood and cutting grass, however, the male as well as the female labour force is employed, but women are not employed equally. Rather, if available, either the male or the female labour force is preferred for individual activities. So for these activities, too, there is a sex-specific division of labour, though it is flexible, not rigid.

The female labour force<sup>5</sup> of the investigated family farms is primarily employed in activities that can be done close to the house<sup>6</sup> (on the average in 70% of the family farms) and for manuring the fields (on the average in 67% of the family farms)<sup>7</sup>. During the labour-intensive periods of field cultivation<sup>8</sup>, an average of 48% of the farms employ female family members.

However, the larger the family farm, the less frequently is the female labour force employed. On the average, 81% of the farms with less than 1.25 acres employ female labour during the labour-intensive periods of field cultivation. On the medium-sized (1.25-3.6 acres) and the large farms (more than 3.6 acres), however, these figures were only 44% and 21%, respectively.

In the case of share-croppers, the application of the female labour force is of more importance than in the case of tenant-farmers and owners. An average of 78% of share-cropper farms employ female family members during the labour-intensive periods and 50% also for irrigation, hoeing or weeding.

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5 Due to the minor importance of cabbage cultivation, only the farms cultivating potatoes and maize have been considered here.

6 Cutting seed-potatoes, cleaning and mixing maize and bean seeds, and peeling maize cobs.

7 Manuring is the landlord's task; share-cropping farms are, therefore, not included.

8 Planting seed-potatoes and harvesting potatoes and maize.



In comparison to the other tribes, the Sawati tribe employs women considerably less often in all activities of field cultivation.

Applying female labour for activities in which women as well as men can be employed, therefore, mainly depends on the socio-economic standing of the farms.

In sum, it may be said that in Battakundi, the sex-specific division of labour is based upon the principle that the living domains of men and women are separate and that women are excluded from public life. They should, therefore, mainly stay close to the house.

The employment of the female labour force nevertheless deviates from this principle for fetching water, collecting wild-growing vegetables and especially in the case of field cultivation.

Hereby, especially the following internal and external economic factors are of importance:

- the limited availability of male labour outside the farms during the labour-intensive periods of field cultivation, and
- the limited access of the small farms and share-cropper farms to the external labour-market.

This ultimately implies that women in Battakundi, though integrated in the whole production sector, are, however, completely excluded from the distribution sector, the market.

The exact quantity of labour-input by women for the different activities could not be established within this study. However, as has already been shown, the application of female labour is influenced strongly by the socio-economic characteristics of the individual family farm. The female labour potential is thus, with certain reservations, dependent upon the time actually spent on individual activities.

## **Bibliography**

- Brüning, K., Schreiber, R., Schütz, R., *Kaghan Valley Potato Seed Production Project*, Midterm Appraisal, Phase II, Vol. I and Vol. II, Eschborn 1986 (mimeo)
- EEC/FAO, Identification Mission, *Report of the Pakistan Kaghan Valley Development Project (NWFP)*, FAO, Rome 1979 (mimeo)
- Grötzbach, E., *Kaghan - Zur Entwicklung einer peripheren Talschaft im West-Himalaya (Pakistan)*, *Beiträge und Materialien zur Reg.-Geographie*, No. 2, 1989, p. 1-18
- Hanus, H., Zingel, W.-P., *Pflanzkartoffelprogramm Pakistan*, Eschborn 1983
- Meyer, G., *A Socio-Economic Study of Farming Systems in the Upper Kaghan Valley, North West Frontier Province, Pakistan*, Göttingen 1988 (mimeo)
- Simoes, J. A., *Objective Oriented Project Planning Workshop in the Kaghan Valley Potato Seed Production Project*, Eschborn 1987