

A NON-CONVENTIONAL WAY OF GETTING EXTENSION TO FARMERS

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ABSTRACT

The paper in hand is based on a study conducted in four selected villages of district Hangu, NWFP during 2008-09, addressing the important issues of rural social mobilization towards productive investments, credit & enterprise development, human and natural resource management and the role of NGOs. The main objective of the research was to appraise the role of SRSP in agricultural development in district Hangu. A sample of 80 respondents was selected through a simple random sample procedure from the selected villages. Almost half of the interviewed respondents were engaged in farming profession, mostly owner. The majority of the respondents were found literate. The study found encouraging results for the role and impact of the NGO (SRSP) in Hangu. Mostly respondent were optimistic about the role of SRSP and reported its remarkable influence on the agricultural productivity. A visible improvement in the crop yields of wheat, maize, tomato, pea's okra and bottle ground was reported. The use of agricultural inputs like chemical fertilizer, insecticides/weedicides and improved seeds etc. doubled in the wake SRSP interventions. Through a scheme of 'bull distribution' by the SRSP in the project area the livestock production also improved. Farmers were made aware of vaccination and in the use of balanced feed to livestock and poultry that resulted in increased production of both livestock and poultry. More than half of the sample respondents were not aware about the presence of extension workers of the provincial agriculture department in the project area. The majority of the respondents regretted the lack of cooperation between the provincial extension department workers and the SRSP staff. According to this research a large group of 86 percent of the respondents viewed that extension agents were not playing a beneficial role for the project area.

Keywords: *NGO's Role, Hangu, Extension, Agriculture, Livestock*

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INTRODUCTION

'Reducing rural poverty' was aimed at as an important development challenge' by the UN, Commission on Sustainable Development 2009, as this objective requires broad based investments in rural areas that benefit entire communities and not only those who are engaged in agricultural activities. Further it states that 'rural development policies are likely to have more sustained impact if implemented in combination with community-based traditional knowledge. Joint policy actions by the Governments, International Community and NGOs in terms of providing access to water and sanitation services, development and rehabilitation of infrastructure and natural resources management have proven to be quite successful in reducing rural poverty (UN, 2009). The issues of rural social mobilization towards productive investments, credit and enterprise development, human and natural resource management are a matter of concern today more than ever. Realizing this important question of rural social mobilization and the role of NGOs, the paper in hand evaluate the impact of NGO; Sarhad Rural Support Program (hereafter SRSP) in district Hangu, NWFP.

The non-conventional way is considered learning from below or "bottom-up" approach (Dolberg, 1991). Agriculture plays an important role in the economy of any agrarian country like Pakistan where one hectare of cultivated land supports on average 6 people and by the year 2020, due to the pressure of rapidly growing population the same land area is expected to support nearly 10 people. Our fragile agrarian structure may not be able to tolerate this pressure until development of rural area in the country has been prioritized.

Development of rural area has always been at the heart of all development efforts such as Basic democracies, Village-AID program and People Works program, since the inception of Pakistan. However none of the programs made any significant difference in improving the life in the rural areas. There are many factors of failure, but corruption, political interference and top down planning were some of the factors constraining rural development (Ali, 1995). In a more recent study, Shah (2009) compared the participatory component of the two participatory rural development projects in the North-West Frontier Province (hereafter NWFP), Pakistan. The participatory rural development models of the two projects were compared in terms of institutional building, rural capital formation, natural resources management and capacity building. The study confirmed that a government-sponsored project is comparatively more effective, efficient and sustainable than an NGO-sponsored project. The superiority of the government project was recognized due to its approach flexibility, exit strategy, over the formulation of NGOs on the basis of economic, socio-cultural and ethnic norms, and values.

The present study was conducted to observe the impact of non-governmental organizations helping community organization (CO) and women's organization (WO) in the rural area of NWFP. The major objective of the study has been to evaluate the role of SRSP in mobilizing population to recognizing their own native resources and indigenous knowledge, in general, and agricultural development in the project area in particular. SRSP was selected as a case study helping communities to organize their resources and utilize their skills productively in district Hangu. The SRSP was established in November 1989 with the objective to reduce poverty in the rural areas of NWFP through participatory community mobilizing approach. SRSP is presently working in ten districts of NWFP comprising Charsadda, Karak, Kohat, Hangu, Peshawar, Nowshera, Battagram, Mansehra, Abbottabad and Haripur. The selection of SRSP's program area is based on a region's level of poverty and willingness of rural communities to become partners of SRSP.

The district of Hangu lies between 33-15' to 33- 35' north latitudes and 70- 29' to 71 – 14' east longitudes and is bounded by a multicultural and multi-ethnicity population on its four sides. Total area under Hangu is approximately 1097 square kilometers as per 1998 census. It has an extreme climate and little resources for good agriculture. Population density in Hangu is 287/km² (Govt of Pakistan, 2000). The local terrain, environment and skill base is more suitable for livestock where at the time of study the livestock enumeration was as; 2574 Cows, 3660 Sheep, 2567 buffalos and 3625 Goats in district (DCR 2008). Wheat, barley, onion and garlic etc are grown in Rabi whereas maize, bajra, rice and groundnut etc. in Kharif.

MATERIALS AND METHODS

The study is based on primary data collected from the sample respondents through face to face interview and filling a questionnaire schedule. A list of community organization (CO) established in different villages of the district has been solicited from the SRSP office Hangu. Four villages of district Hangu were purposely selected on the basis of equal number of COs and SRSP activities. The 20 respondent from each village were randomly selected thus total 80 respondents were selected for the research. The total members of CO were 320, so 80 members were present in each village. Therefore, 20 respondents from each village were selected randomly by using lottery method. The names of the selected villages are: Darsamand, Naryab, Loddikhel, Raisan. Since the data collected through the questionnaire and interview was significant in its qualitative value hence simple statistical techniques were used to aggregate the average response. The collected data was edited and after editing it was transferred on tally sheet, which facilitated for text tabulation.

RESULTS AND DISCUSSION

The SRSP presence in the area has proved to be a blessing for the native people, agriculture and social mobilization schemes. The local people comprehended the worth of independent decision making and the way their resources can improve their lives. The study found that a significant increase in the area and production of cereals, vegetables and fruits occurred on the cost of reduction in the area under rangeland. The units of livestock holding have decreased significantly in the last few years due to the non-availability of high breed livestock herds, migration and changing nature of occupations. The study finds that community diverted significantly to the higher cash income activities. Similar finding for agriculture, livestock, and HRD training and credit program were reported by (Hassan, 2003). Introduction of improved seed varieties matching the crop environment of local agriculture was warmly welcomed by the predominantly agriculture based community. The response regarding introduction of improved seed varieties has been reproduced in Table I. A majority of 77 percent responded positively towards the improved seed introduction by the SRSP in the area. Respondents were also asked to reflect about the other sources of

knowledge about improved seed varieties. A majority of 74 percent were the beneficiaries of SRSP while the remaining were the recipient of the extension service including another 9 percent who were informed by various types of electronic media. This indicates that SRSP was playing a positive role in recognizing the real needs of the local community and hence has to play an effective role in the overall development of the project area, particularly in agriculture.

Table I Introduction of improved seed varieties of crops and vegetable

Sample Villages	Impact of Improved Seed Varieties				Sources of Awareness about Seed Varieties											
	Yes	%	No	%	Total		Extension		SRSP		Electronic Media		Fellow Farmers		Total	
					No	%	No	%	No	%	No	%	No	%	No	%
Darsamand	17	85	3	15	20	100	8	40	17	85	3	15	12	60	40	200*
Naryab	16	80	4	20	20	100	3	15	15	75	1	5	13	65	32	160*
Loddikhel	14	70	6	30	20	100	-	-	14	70	2	10	12	60	28	140*
Raisan	15	75	5	25	20	100	3	15	13	65	1	5	12	60	29	145*
Project area (Total)	62	77	18	22	80	100	14	17	59	74	7	9	49	61	129	161*

Source: Field Survey

SRSP maintains model demonstration plots for introduction of innovativeness and new technologies in the area. Information regarding the demonstration plots has been presented in Table II. Majority of the respondent's (56 percent) were aware of these plots and their objectives. About the provision of good quality of fruit plants by SRSP, only 19 respondents (24%) agreed getting good quality seed and fruit plants (Apricot and plums), while majority, 61 respondents were complaining about the non-availability of any new technology and good quality plant.

Table II Demonstration plots and provision of a good quality fruit plants

Location	The Demonstration Plots						Provision of Good Quality Plants					
	Yes	%	No	%	Total		Yes	%	No	%	Total	
					No	%					No	%
Darsamand	16	80	4	20	20	100	6	30	14	70	20	100
Naryab	13	65	7	35	20	100	4	20	16	80	20	100
Loddikhel	14	70	6	30	20	100	5	25	15	75	20	100
Raisan	13	65	7	35	20	100	4	20	16	80	20	100
Project area (Total)	56	70	24	30	80	100	19	24	61	76	80	100

Source: Field Survey

During field observation it was learned that SRSP has been trying the level best to improve the agriculture in the area. This was supported by the data that SRSP has done an appreciable service to combine the traditional agriculture with modern agriculture in the project area. Table III shows the average yield of various crops before and after the SRSP functioning in study area. The practical increase in average yield proved the plus impact of the organization's activities in the project area. The average yield of cereal crops like wheat and maize was increased by 38% and 20%, respectively. The Table further indicates that the average yield of potato, tomato, peas, okra, onion and bottle guard increased by 10, 65, 43, 18, 20, and 37 percent, respectively. The production and yield of fruits like plum and apricot increased by 8 and 10%, respectively.

Table III Average yield impact of different cereals, vegetables and fruits, mounds/kanal

Cereals	Before	After	% change
Wheat	1.09	1.5	38
Maize	1	1.2	20
Vegetables			
Potato	10	11	10
Tomato	1.7	28	65
Peas	7	10	43
Okra	11	13	18
Onion	10	12	20
Bottle guard	8	11	37
Fruits			
Plums	12	13	8
Apricot	10	11	10

Source: Field Survey

An agricultural economy flourishes and functions properly when its input and output market are approaching equilibrium and price mechanism is established. As a response to demand, the supply of the input has been leveled ensuring right price for right amount of input. There had been significant increase in the use of selected improved agricultural inputs in the project area after the involvement of SRSP program. However, the loss of traditional practices has been noticed since little amount of farm yard manure and almost no bullock plowing in the fields have been visible. Moreover, the local community earlier unaware of chemical fertilizer, improved inputs and pesticides have been increasing its use to get extra production and earn more money. The adoption of improved techniques, especially application of chemical fertilizer, pesticides/ insecticides and improved seeds can further be ascertained from the data given in Table IV. It shows a positive change in adoption of modern techniques in the project area. These results are parallel with Hassan and Shah (2001) who found the similar impact for an NGO.

Table IV Use of selected agricultural inputs by sample respondents

Location	Chemical fertilizers				Insecticides/Weedicides				Improved seed				Modern machinery			
	B	%	A	%	B	%	A	%	B	%	A	%	B	%	A	%
Darsamand	9	45	19	95	4	20	18	90	6	30	16	80	16	80	18	90
Naryab	11	55	19	95	3	15	17	85	4	20	12	60	14	70	19	95
Loddikhel	13	65	18	90	4	20	20	100	5	25	17	85	15	75	18	90
Raisan	10	50	17	85	5	25	17	85	6	30	14	70	14	70	18	90
Project area(Total)	43	54	73	91	16	20	68	87	21	26	59	74	59	74	73	91

Source: Field Survey

As discussed earlier in general the SRSP aimed at bring positive change in a society by improving socio-economic conditions of the local people. It has been equally cooperating in the agriculture as well as in poultry and livestock development. The effect and contribution of SRSP on the livestock and poultry development in the project area is that, NWFP comprised of different ecological zones with varied climatic condition suited to grow different crops, poultry and livestock.

In NWFP, more than 60 percent of land is under mountain and directly depends on rainfall as the sole source of irrigation. Here cultivated land is being spread all over the region in small pockets separated by mountain and river. Moreover the small strips of cultivated land are usually sloped and fertility is being wasted during summer rains. Looking at these features livestock and poultry are more reasonable choice needing little investment and natural grazing land takes care of the rest. However due to lack of sufficient education, knowledge of modern resources and varieties our rural people remain under benefited of their very own resource potential. In this regard data was solicited through primary sources keeping in view that livestock and poultry production is obviously an important choice of the rural setup in the project area. Table V shows that 124 good qualities of goats and 1055 poultry were distributed by SRSP in the project area two improved breed bulls in Naryab and Loddikhel. Poultry, however, could not flourish due to non congenial environmental and disease attacks. There was a great development in breeding livestock due to bull availability in the project area.

Table V Livestock and poultry heads distributed by SRSP

Location	Goats	Poultry	Bull Distribution
Darsamand	34	250	-
Naryab	35	220	1
Loddikhel	30	300	1
Raisan	25	285	-
Project area (Total)	124	1055	2

Source: Field Survey

CONCLUSION AND RECOMMENDATIONS

The present study was started to achieve the goal of reviewing and finding the actual impact of a non-governmental Organization actively supporting the local people towards achieving the goal of self reliance and making best use of their indigenous recourse base. The results coming out of 80 respondents majorly reflected that, in general people were satisfied with the role played the SRSP over the last few years. They evaluated the NGO's role relatively more active and encompassing while compared to the extension workers in the government

agriculture department. The public sector extension services in which governments of less developed countries (LDSC) have invested large sums often at the behest of donors are achieving uneven impact, often at unsustainably high costs. Further, the fundamental premise of public sector extension - that low-income farmers are unlikely to obtain technical information unless it is provided by government increasingly requires re-examination.

Mostly people did not know about provincial extension department workers in the project area, literacy was very high in the project area due to the people involvement and interest in the SRSP developmental activities. SRSP arranged different types of training for their members of community organization (CO)/ women organization (WOs). Mostly people had applied practically the trainings received. People were using improved seed varieties of crops and vegetables. SRSP laid out demonstration plots of crops and vegetables (Maize, Wheat and Okra). Also some good qualities of fruit plants were distributed in the project area. The area under vegetables and cereals increased. However, no change occurred in the orchards land. As a result of SRSP activities the production of tomato, okra and pea increased. Tomato, okra and pea are now cash crops of the project area. The project had brought a dynamic change in the livestock except poultry sector.

- i. For agricultural development, there was a need for layout of demonstration plots and the provision of improved seed varieties of crops, vegetables and good quality of fruit plants.
- ii. For long term planning, SRSP should develop technical packages according to the needs of area and should continue its efforts to increase agriculture and livestock so that the pace of development could be increased.

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