

Determining the Disinterest of Farmers for Community Tubewells in Punjab

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Abstract

The main objective of the research study was to explore the reasons why the farmers were not interested to install the community tube-wells. A project entitled "Punjab Private Sector Groundwater Development Project" was co-funded by the World Bank and Government of Pakistan. The project was implemented under the control of a Project Management Unit (PMU). The Punjab Irrigation Department and the Directorate General of On-Farm Water Management of the Agriculture Department were the main participating agencies. The project area almost falls in most of the Punjab. The universe of the study consists of four Salinity Control and Reclamation Project (SCARP) areas (SCARPs II, III, IV and V). The consultancy to the project was a consortium of four companies: Euroconsult, NESPAK, NDC and Halcrow. The main objective of project was transitions of SCARP tube-wells and installation of community tube-wells on the same watercourses by mobilizing the farmers as alternative source of irrigation. The project execution period was five years and all the SCARP tube-wells were to be transitioned in this period. There were 949 SCARP tube-wells in total in the whole project area and out of these there were 164 SCARP tube-wells on which farmers were not interested to form Tube-well Groups that is precondition for installation of a Community Tube-well. The sample was selected from Shahdera area (one of the regional offices of the Consultants) and Participatory Rapid Appraisal (PRA) techniques were used to assess the views of the farmers. Moreover, some structured and semi-structured interviews were conducted as well as informal discussion were held and transect walk along the watercourse were also made. The results of the study showed that there were four reasons for farmers' non-participation and non-cooperation in installation of community tube-

first, not full awareness about the project, second, social constraints, third, availability of irrigation wells. These were water and fourth one, physical constraints. Some recommendations have also been made at the end of research paper for generating re-interest of the farmers to install the community tube-wells.

Key Words: SCARP Tube-wells, Community Tube-wells, transition, salinity, water logging, Farmers' Groups.

Introduction

The Punjab Private Sector Groundwater Development Project was conceived by the World Bank in consultation of the Government of the Punjab for mainly transition of SCARP tube-wells (the tube wells installed in 1960s for control of salinity and reclamation, which mean reclamation of affected land from salt deposits and water logging) and installation of community tube-wells on the same watercourses from where the SCARP tube-wells were to be dismantled. The project was implemented under the control of a Project Management Unit (PMU), Irrigation and Power Department, Government of the Punjab. The PMU hired the consultants for the execution of the project which were a consortium of National Engineering Services of Pakistan (Pvt.) Limited, Lahore, Euroconsult of Neitherland, National Development Consultants (NDC) Ltd. Lahore and Halcrow, Pakistan Pvt. Limited Islamabad. The project period was from 1997 to 2002. The major project objectives were wider: develop sustainable farmers' organizations (FOs), improve surface irrigation and establish a base for participation in the management of canal system. One of the main specific tasks was the closure of the SCARP tube-wells (STWs) and to mobilize the farmers to form watercourse associations and installation of community tube-wells (CTWs) through formation of Community Tube-well Groups (CTWGs) and provision of subsidy for CTW by the Project. The social mobilization of the farmers' community was the responsibility of the Consultants (a social mobilization team) of the project. The project area included the central and southern parts of

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the Punjab province or in other words the area between the River Chenab and the River Ravi as well as the area irrigated by Northern Jehlum canal and Southern Jehlum canal.

More than 3000 Farmer's organization (FOs) were formed during the project execution period. However, of all STWs and watercourse visited by the social mobilization team members, a significant number (about 17%) were uninterested in forming the FOs, a necessity of installing a CTW. The social mobilization was stopped at the end of the project period. The number of the uninterested cases is a big and it was the responsibility of the consultants to mobilize all the farmers to form FOs for closure of all STWs and installation of CTWs before the end of the project. So there was a need to identify the reasons for uninterested cases in order to reactivate them and finish the left over work of the project. Keeping in view the importance of this national level issue this research study was conducted. Although there is wide spatial variation due to the location of the disinterested cases, which are scattered throughout the project area (SCARPs II, III, IV and V) and then further each SCARP is divided into different schemes. But it was assumed that there would be no

Table 1

Sr. #	SCARP Area	Total STWs	STWs without CTWs	%age of STWs without CTWs
1.	Mandi Bahauddin (SCAP-II)	222	32	14
2.	Sargodha (SCARP-II)	357	59	17
3.	Athara Hazari (SCARP-III)	138	20	14
4.	Shahdra (SCARP-IV)	232	53	23
	TOTAL	949	164	17

There were four regional offices of the executing agency (consultants). However, keeping in view the data availability, cost and time, resources available and practical evidences, and assuming that there would be no variation of reasons for uninterested cases throughout the project area, a sample of 5 cases (SCARP tube-wells) from Shahdra area spread all along the River Ravi was randomly selected for research study. Fitzbiggon and Morris (1987) stated a simple principle or rule of thumb that "as the size of the population increases the sample size decreases". This principle was the basis sample selecting procedure for this study. A list of all SCARP tube-wells was collected from the consultants' office which was used as sampling frame for this study. Participatory Rapid Appraisal (PRA) techniques were used to conduct this study. A key element regarding PRA is to use and learn from the local peoples' knowledge. For this research this is one of the major importances since the framer's knowledge is the sole and most essential resource to identify the reasons for not being interested in installing CTWs. The main working principles used during the research were:

variation of reasons for uninterested cases throughout the project area. Moreover, the irrigation department officially de-notified and closed all the STWs which were irrigating and no Community Tube-well Group (CTWG) has been registered to install CTW on the visited watercourse in spite of the repeated visits of the social mobilization team members.

This study was conducted to determine the reasons given/expressed by the farmers for not willing to form FOs under the conceived project's social mobilization set up. The study does not only identify the reasons, but also gives recommendation on how to reactivate the farmers and renew/regenerate the interest of the farmers on presently uninterested STWs, either by increasing the quantity and/or quality of the social mobilization efforts or by adjusting the project policy.

Material and Methods

There were 949 STWs in all SCARPs' area as indicated in Table: 1 and out of these there were 164 STWs without CTWs. It means that there were 17 percent uninterested cases in total. The detail of each area is given in the following table:

- ✓ **Informal approach:** use of semi-structured and informal interviews and open discussions with the farmers (both individuals and in groups).
- ✓ **Triangulation:** cross-checking the information received through different sources and by using different techniques of data analysis.

For each case the structured part of collecting information consists of the following subjects:

- ✓ Farmers' awareness about the project;
- ✓ Farmers' assessment about the actual availability of the irrigation water;
- ✓ Farmers' assessment to cooperate in group work; and
- ✓ Farmers' opinion for presently not having community tube-well.

The farmers' opinion could not be fully covered under these predetermined subjects. So the issues raised by the farmers on the topics related to the research but not falling within one of the predetermined subjects were also addressed. The reasons quoted by the farmers and personal

observations of the interviewer were combined and were noted in the sequential order. The second part assess the potential for un-interested in CTWs. Like the reasons for disinterest, the potential for re-interest has also been compiled on the combined judgment of the farmers and the researcher.

In some cases transect walk along the watercourse was also made to assess the opinion of the farmers at different reaches (head, middle and tail) of the watercourse. During this transect walk, farmers working in the field were approached to reflect on the subject under study.

Results and Discussion

The survey results showed that there are several reasons for the farmers not willing to form FOs under present project policy. To structure these reasons they have been categorized as below:

- Project awareness of farmers and their confidence in the project;
- Availability of irrigation water for the farmers;
- Social constraints; and
- Physical constraints.

The detail description regarding farmers’ reflection about above mentioned subjects is given in the following paragraphs:

Project Awareness

The answer to the following questions identified (explained) that whether project awareness was a main reason for farmers not to participate with the project:

- ✓ Was there any suspicious of the farmers about the project?
- ✓ Was farmers along the whole watercourse aware of the visit of the Social Organizers (SOs) of the social mobilization team of the consultants and do they have some understanding of its components?
- ✓ Did the Social Organizer (SO) follow-up his initial visit?

The case studies as described in Table: 2 showed that suspicious by the farmers was reported by three (3) cases and one reported that it was the main case for not participating with the project. The farmers were afraid that they have to return the amount of subsidy. Lack of follow-up visits by the SO was mentioned in three (3) cases and out of these three, two (2) informed that this was the main cause of not installing the CTW.

Table: 2

Categories of Reasons	Major Reasons for Disinterest	Number of times mentioned	Mentioned as main reason
Project Awareness	• Afraid of returning the subsidy.	3	1
	• Farmers did not know the SO and do not know the major components of the project.	2	0
	• No follow-up visit by the SO.	3	2
Sub-total		8	3
Availability of Water	• Surface water is sufficient.	2	1
	• Many private tube-wells are installed on watercourse.	5	4
	• STW still working at the time SO visited.	4	3
Sub-total		11	8
Social Constraints	• Family/Cast conflicts.	4	3
	• No interest among the farmers.	5	1
	• Afraid of influential/Large farmers	4	3
Sub-total		13	7
Physical Constraints	• Urban Area, no irrigation is required.	1	1
	• Groundwater is brackish and/or saline.	3	2
	• Large landholdings, no demand for CTW.	2	0
Sub-total		8	3
Grand Total		38	21

Availability of Irrigation Water and Needs

Water supply for irrigation consists of surface (canal) water supplemented by groundwater either by STW or Private Tube wells (PTW). It was revealed that STWs (MDk 275 and MDK 276) were still in running condition, despite their official closure.

Keeping this in mind the following were the replies of the respondents:

- Surface water is sufficient;
- Many PTWs have been installed; and
- STW was still working.

The case studies (Table: 2) showed that only in two (2) cases farmers stated that they received sufficient canal water and do not need additional water by installing CTW. Many farmers out of four (4) reported cases, three (3) stated that one of the major reasons of not installing CTW is that STW was still running so no need of additional water. Similarly four (4) cases among five (5) reported the high number of PTWs located /installed on the same watercourse is the main reason of not installing the CTW. As the farmers have had already made their own arrangement for irrigation water from their own resources, therefore, they are not interested to install CTWs.

Social Constraints

A third category of reasons for farmers presently not taking interest in forming CTWGs is social constraints. The social constraints can be divided into the following three topics:

- ✓ Family/caste conflicts;
- ✓ No trust among the farmers; and
- ✓ Farmers are afraid of influential/large farmers.

Table: 2 showed that family/caste conflicts were reported four (4) times as one of the reasons for not willing to form CTWG. At three (3) of these visited cases this was the major reason for not cooperating. At these STWs, severely and deeply rooted social problems prevented cooperation among the farmers. At two STWs farmers did not want to form a group, as they did not trust on other farmers and at one out of these five (5) STWs this was stated as the main reason. This indicated that although at some STWs farmers have fear to work together, this fear is often not their main reason for not framing a FO. Therefore, sufficient efforts of the concerned SO can in many cases remove distrust among the farmers. In all cases the distrust among the farmers was related to the responsibility for Operation and Maintenance (O&M) of the tube well. Farmers were in particular afraid that in case of a technical fault it would be very difficult to collect money from all the members. For this reason farmers preferred the installation of a PTW above a CTW, despite its higher cost.

Small farmers along four watercourses while conducting transect walk mentioned that they were

dependent on influential farmers regarding the formation of a CTWG. Along three watercourses this turned out to be main reason for this present disinterest. Farmers along these watercourses felt that they had to consult the influential farmers before framing a CTWG. As most of these influential farmers did not take interest in installing CTWs, therefore there was no possibility for other farmers to form a group. This indicated that existing personal power structure on a watercourse restricted the small farmers to install a CTW.

Physical Constraints

The last category covers the STWs where physical constraints caused disinterest by the farmers. Table: 2 showed that this category includes one outlet/watercourse the land of which has been converted into urban areas due to sprawling of near by city or town. No agriculture practice is taking place at the vicinity of these lands. In other three (3) cases saline groundwater restrict the farmers in forming a CTWG. As might be expected, there is no potential for re-interest at this site.

The data in Table: 2 further reveals that two time farmers mentioned that large landholdings along the watercourse prevented them from installing a small capacity CTW. They stressed that it is policy of the project to irrigate all land from a group consists of 30% of the shareholders of the watercourse and stated they would only take interest if they are allowed to form a group with a smaller number (%age) of farmers. Although it seems a solid reason and it should be kept in mind that farmers themselves make the decision about the site of CTW and its discharge capacity.

Potential for re- interest in Community Tube wells

About 20 STWs were visited for this purpose. Table: 3 showed the potential for re- interest of the farmers on the STWs visited. It revealed that 5 cases has medium-high and 9 cases has high potential for re-interest, which is 70% of the total STWs visited. As mentioned earlier, this potential for re-interest has been assessed on the combined judgment of farmers and the researcher.

Table 3

Categories of Reasons	No of STWs Visited	Potential for re- interested in CTWs			
		Low	Medium	Medium-high	High
Project Awareness	5	0	0	1	4
Availability of Water	5	0	0	2	3
Social Constraints	5	3	2	0	0
Physical Constraints	5	0	1	2	2
Total	20	3	3	5	9

Summary, Conclusions & Recommendations

Additional social mobilization efforts along the watercourse where farmers are presently not interested in installing a CTW will have a considered impact and could bring the fruit, as the data in Table: 3 showed that in 70% cases have medium-high and high potential for re-interest. The detail of area of intervention is given as under:

Regarding Project Awareness and Availability of Water

A high percentage of farmers are not fully informed of the project and they did not meet the concerned SO. In this case at four (4) visited places the farmers showed the high potential of re-interest. Therefore, it is recommended that the SO should revisit the farmers on such STWs and explained the project objectives. Moreover, it will be helpful to remove the misconception of those farmers who are afraid that they have to pay back the amount of subsidy. It is expected that with the passage of time this reason is to disappear. However, at those sites where farmers are still afraid for having to return the subsidy amount, farmer-to-farmer visits might be arranged for developing the trust of such farmers.

In cases where the STW is still working or the number of PTWs is high on that watercourse, the farmers showed un-interest to install a CTW. In all five cases which were visited the potential re-interest is medium-high and high with the precondition that STW will be closed. At all these STWs the concerned SO should encourage the farmers to proceed for a modification case or take over the STW as CTW. At those watercourses where the number of PTWs is high the SO should continue his social mobilization efforts and approached those who have no access to water from PTWs (Who do not own a PTW).

Regarding Social Constraints

In cases where the farmers have not trust to work in cooperative communal activities, a visit of a successful working CTW could be arranged. It will give them confidence about community endeavors as "seeing is believing". At watercourse where influential farmers are the main reason for disinterest

it is recommended to identify those farmers who obstruct the formation of CTWG. If so, it is the task of the SO to convince them that the CTW will not have any negative impact.

Regarding Physical Constraints

At watercourse where brackish or even saline groundwater is prevalent it is recommended to listen to the farmers whether they think that they use groundwater water by mixing with surface (canal) water. In case farmers oppose the idea of using this type of groundwater the SO should leave such cases as uninterested. If the majority of the farmers along the watercourse have large landholdings, the SO should leave such watercourse and mark it as uninterested.

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