

IMPACT BRIEF

Issue #4, May 2016



Sector: Media

Interventions: Improve Rural Radio Programming

Districts: Jhapa, Sunsari, Banke, Dhangadi, Dhading

Radio restores farmer's right to irrigation



Irrigation is a basic requirement for productive farming. Access to seed and appropriate fertilizers alone cannot yield effective output if the land to be cultivated is not properly irrigated. Nepal's economy is highly dependent on the agriculture sector and irrigation plays a vital role in its performance at national, regional, and individual level.

Terai, the bread basket of Nepal, produces major cereal crops throughout the year. Farmers in this region cultivate paddy, wheat, maize, vegetable, and

other high value crops, which form their primary source of income. Any disruption in the water supply along the major irrigation canals, especially during the dry season, immensely restricts growth, yield and harvest of agricultural produce.

This case describes the impact of a damage caused to an irrigation canal on the local farmers of a remote village in Jhapa district of Eastern Nepal, where a radio programme intervened to draw the attention of concerned stakeholders for the reconstruction of the irrigation canal which consequently increased the income of smallholder farmers of the village.

Damaged dam leaves farmers helpless

Gaurigunj, a small village located in the south west region of Jhapa, isolated from the district headquarters has limited access to urban facilities and services. The households in the VDC have on average seven members, of which two (usually husband and wife) are engaged in agriculture. Residents of the VDC rely mostly on agriculture for their income and cultivate cereal as their major cash crop.

The Lower Kisni Khola Irrigation Project, a joint venture between the Government of Nepal and the Asian Development Bank, is the only source of water during the dry season in Gaurigunj and the surrounding areas. The project became operational in November 1996 and irrigated 1,500 hectares of land within Juropani VDC (Ward No 1 and 2) and Gaurigunj VDC (Ward No 2, 4, 6 and 8).

In the monsoon of 2013, the irrigation dam was damaged by the flood making cultivation impossible in the surrounding areas during the dry season. Almost 50% of the farmers in the VDC were affected by the damaged dam out of which, approximately 17% comprised the poorest farmers - those farmers with less than one hectare of land. These farmers were the hardest hit since they not only lost their income due but also had to buy cereal crops for their own consumption.



Radio helps bring farmers' plight to the fore

Kanchanjunga Radio, one of the media partners of Samarth-NMDP, started to air interactive agriculture programmes to bring the woes of the farmers of Gaurigunj to the fore. Samarth had provided the station with training and mentoring support as well as partial programme start-up cost to make the programmes audience driven, participative and field based, following the principles of ethical journalism.

The FM station picked up the issue of Kisni Khola dam on its programme and conducted two focused group discussions with District Irrigation Office (DIO) in the presence of the Dam Consumer Committee and several farmers. The initial broadcast drew the attention of the concerned authorities regarding the plight of the smallholder farmers of Gaurigunj. The radio then followed up on the issue with the DIO and allowed the Dam Consumer Committee to actively advocate for the repair of the dam through its programmes. On January 2015, the irrigation office released NPR 1.2 million to enable temporary repairs to resume operations of the dam.

Impact on the farmers

A mini-survey conducted by Samarth-NMDP, showed that 24 out of 30 respondents of the village, believed that the dam was repaired due to the pressure from the FM station and the Dam Consumer Committee. The survey was done using retrospective method where respondents were asked to recall the situation during the damage and after the repair. There is also a clear indication that the land cultivated for major crops by the local farmers increased after the repair to the irrigation facility.

Samarth-NMDP validated the results through an interaction with a DIO representative, site visits and a survey conducted among the farmers of Gaurigunj VDC. The DIO confirmed that Kanchanjanga FM played an instrumental role in pressuring the DIO to release the fund for the repair works of the dam.

"We had been pressuring the District Irrigation Office for the reconstruction of the dam. However, it was only after Kanchanjanga FM focused on the topic, our pressure proved to be more effective. We would want to thank Kanchanjanga FM for helping us and hope that they will continue to bring such critical issues into light until tangible results are achieved."

**-Kedar Dhungel,
Immediate Past President of the Dam Consumer Committee**

Area of land irrigated (in Ropani)			
S.N.	Crop	During damage	After repair
1	Off-season paddy	14	17
2	Wheat	11	17
3	<i>Patuwa</i> (Cash crop)	2	3

Some farmers used underground water sources to cultivate crops during the dry season which increased the cost of production. The average amount spent for using water pumps was approximately NPR 54,000 with additional cost for fuel. This extra cost led to the decrease in cultivated land directly impacting the farmers' productivity. Generally, an increase in cultivated land has a positive impact on production leading to better income.

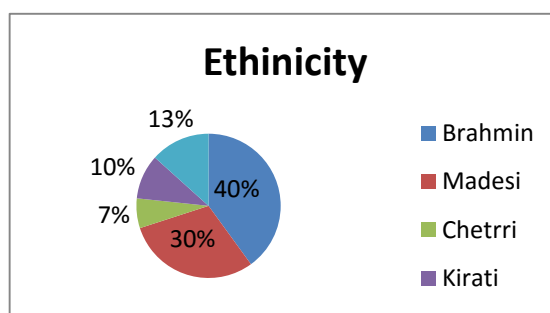
This was validated through the statement of farmers in the survey as the increase in cultivated area produced higher yield. Some of the respondents also said that it saved the fuel cost of using water pumps. In monetary value, farmers were able to increase their income by NPR 20,765 per household since they were able to grow additional crops like off-season paddy, wheat and *patuwa* on the land which they would have otherwise left fallow. The detailed calculation of income change is given in the table below:

Net Income Change				
S.N.	Crop	Total average revenue during Damage	Total average revenue after Repair	Net change
1	Off-season paddy	30,091	35,640	5,548
2	Wheat	43,602	57,078	13,476
3	Patuwa	9,827	11,567	1,740
	Total	83,520	104,285	20,765

Note: Farmers cultivate other crops like potato, vegetables, paddy, mustard, and maize but the repaired irrigation canal helped farmers to expand cultivation area of the above mentioned crops, which led to additional income gains.

The temporary renovation of the irrigation canal benefitted 925 farming households out of the total of 1,041¹ as stated by the then president of the Dam Consumer Committee. Out of the total beneficiaries, 50% of the beneficiaries are women and 53% are from disadvantaged groups.

The attribution of the radio programme is clear. Farmers cited that the role of Kanchanjunga FM was crucial as it not only highlighted the problems of the farmers but also helped reach a solution.



The District Irrigation Office recognized the role of the radio and most interestingly stated that they "Wanted the radio to play the role of a watchdog so as to deter such incidents happening in the future". Farmers also stated that they would want the local radio to pressurize the government to rebuild the damaged irrigation dam which is currently only temporarily fixed. On October, 2015, with the pressure from both the media and local community, the local government body has committed to a sum of NPR 90 million for the permanent reconstruction of the dam. If the dam is permanently fixed, it will serve the entire 1,500 households of Gaurigunj VDC as well as additional households in Jhorpani VDC which would increase the income of the entire villages irrigated by the dam.

¹ Interaction with Chairman of Kisni Khola Dam Consumer Committee

About Samarth-NMDP

Samarth-NMDP is a five year UK aid-funded program that aims to reduce poverty in Nepal by increasing the income of smallholder farmers and small-scale entrepreneurs. The programme follows a market systems development approach, addressing underlying causes in the performance of the market systems, to bring about more competitive and sustainable markets that work better for the poor.