IMPACT ASSESSMENT REPORT

CANADIAN INTERNATIONAL DEVELOPMENT AGENCY

GUJRAT EARTHQUAKE REHABILITATION PROGRAM

BHUJ, GUJRAT STATE
(05 November 02)

Impact Assessment Survey of Phase-I , CIDA

- **Purpose of the survey**

The purpose of the survey conducted was to measure the yield and income of the farmers from a representative sample. It also intended to understand the fact whether the target farmers benefited in terms of knowledge enhancement regarding vegetable cultivation and deal with scarcity of water for irrigation. This survey also tried to understand the farmer's willingness to use the technology in future.

- **Study Methodology**

The study was conducted using two different methodologies among the 1200 small and marginal farmers who received the technology during the project.

1) Questionnaire survey – A stratified random sample of 60 farmers was selected from 4 villages. IDEI staff met each of the selected farmers and conducted an interview using a questionnaire.
2) Focus Group Discussion – A discussion was held among a group of farmers in 4 villages wherein each group comprised of 10 to 12 people.

The farmers who participated in the survey were Vegetable Garden Kit users.

- **Place of Study**

The Questionnaire Survey was conduct in 2 taluks covering 4 villages. The name of which are detailed below along with the number of participant from each village.

Talika	**Villages**	**Sample Size**
Bhuj	- Mota Bandra - Nana Reha - Paiya	5 31 10
Raper	- Bhutakia	14
Total		**60**

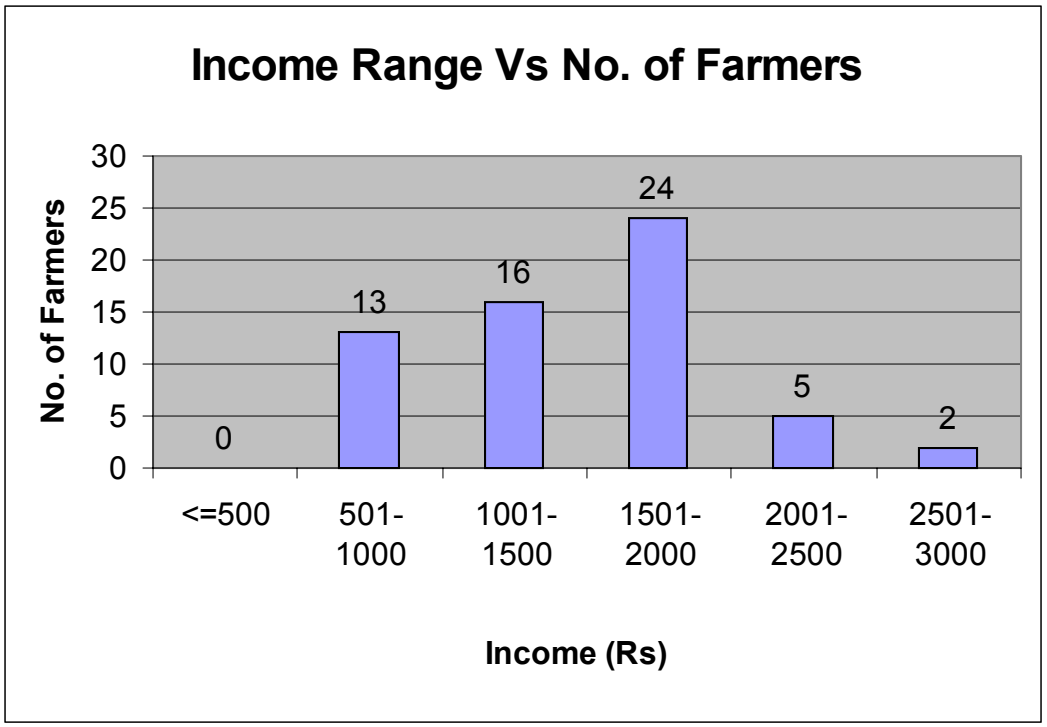
The Focus Group Discussion was held in 2 villages each in 2 talukas. The details of which are give in the table below along with the group size.

Talika	**Villages**	**Group Size**
Bhuj	Chapredi Lakhod	12 10
Raper	Vallabhpur Padampur	10 10
Total		**42**

- **Findings**

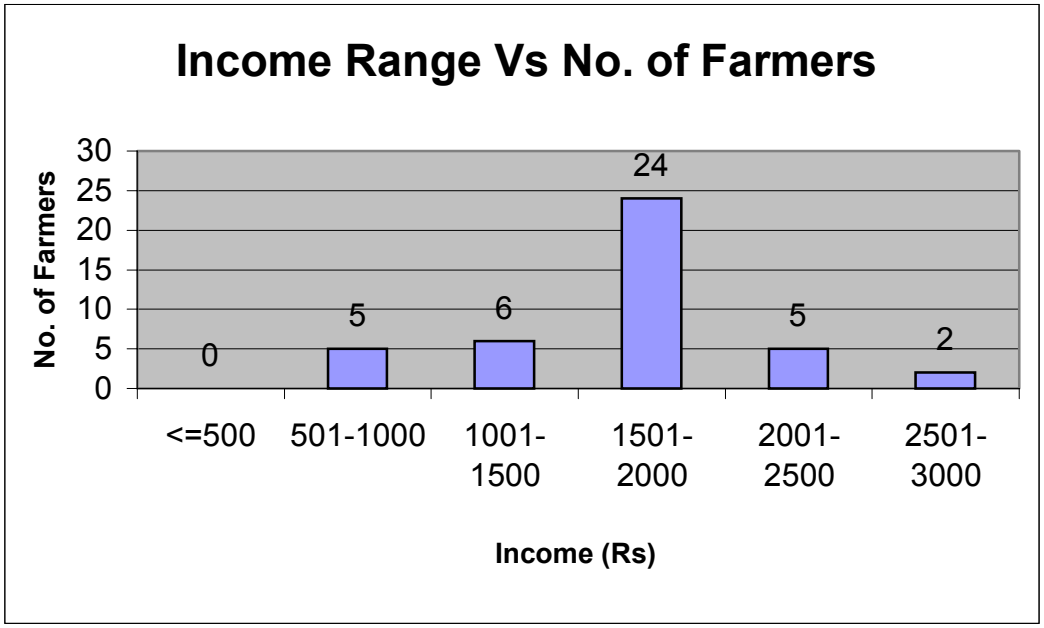
Income (Using Questionnaire Survey)

The yields of vegetable taken from the fields by the farmers were almost equally divided between the household consumption and for sale. The survey revealed that 60% of the total produce was sold in the market and the remaining 40% was used for household consumption. This effectively brought in, an average of Rs. 911/- in the household and saved an average of Rs. 611/- (that would have been spent for purchasing vegetables from the local market). After the study it can safely be said that the use of drip irrigation system will yield on an average of 2 Kg. of vegetable amounting to an estimated value of Rs. 15/- per square meter. It was interesting to note that the farmer grew vegetables worth Rs. 680/- on the lower side to Rs. 2768/- on the upper side.



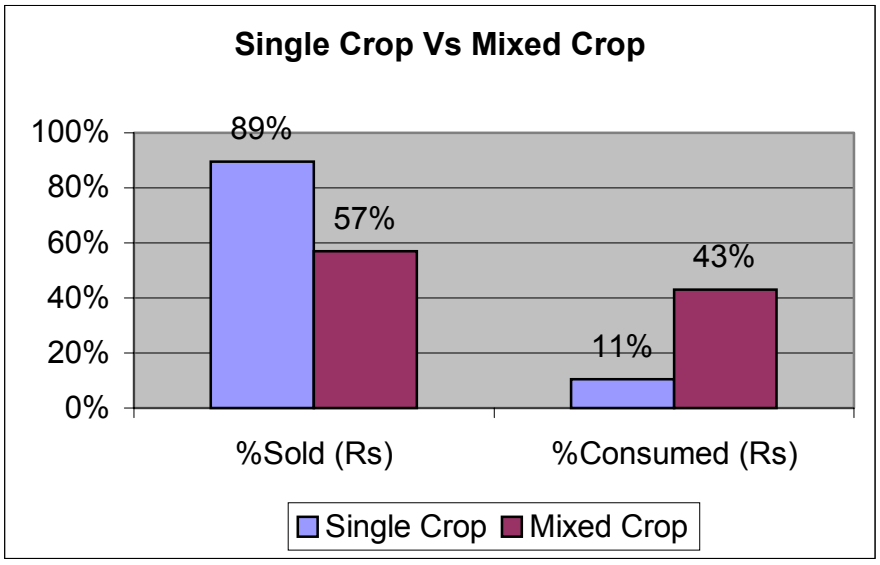
Income (Using Focus Group Discussion)

During the discussion with the focus group it was evident the produce from the Vegetable garden kit is almost divided in equal proportion for sale and for home consumption. It was understood that 56% of the produce is sold in the local market and the rest 44% is set aside for home consumption. This on an average brought in Rs. 953/- in the household and save a sum of Rs. 752/-. On an average at produce of 1.87 Kg. per square meter can be expected by use of Vegetable garden kit. The discussion group also revealed that maximum number of people fell in the income range of Rs. 1500/- to Rs. 2000/-.



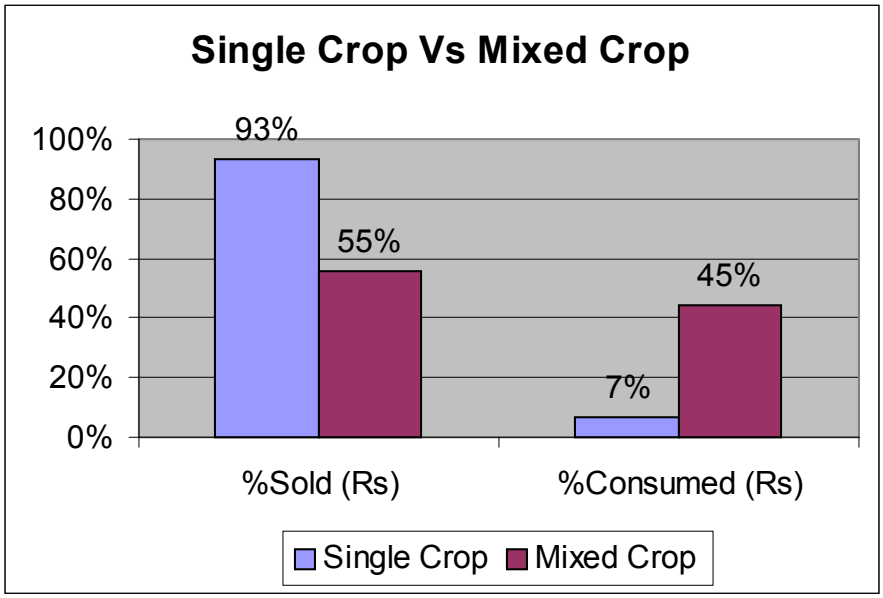
Cropping Pattern (Using Questionnaire Survey)

87% of the farmers grew more than one kind of vegetable while a small percentage of people 13% grew a single crop. It was interesting to note that the multiple crop growers sold 58% of their produce in the market and the rest 42% was consumed in the house thereby affecting their income in the same proportion. However among the single crop growers 90% of the produce was sold in the market and a very thereby affecting the money inflow to the household.



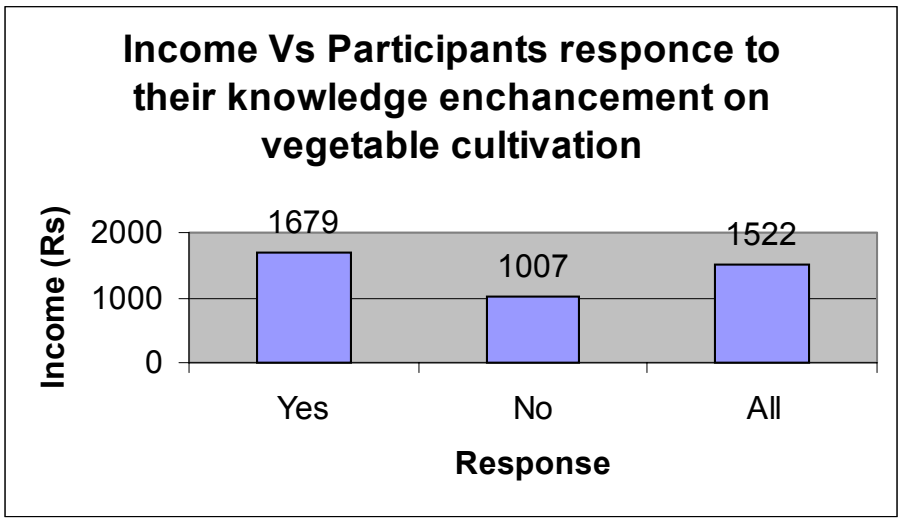
Cropping Pattern (Focus Group Discussion)

98% of the farmers grew more than one kind of vegetable while a mere 2% of the farmers grew single crop using the vegetable garden kit. It was understood that single crop growers sold 93% of their produce while the growers of multiple crop sold 55% of their produce while the rest was consumed at home.



Knowledge Enrichment (Using Questionnaire Survey)

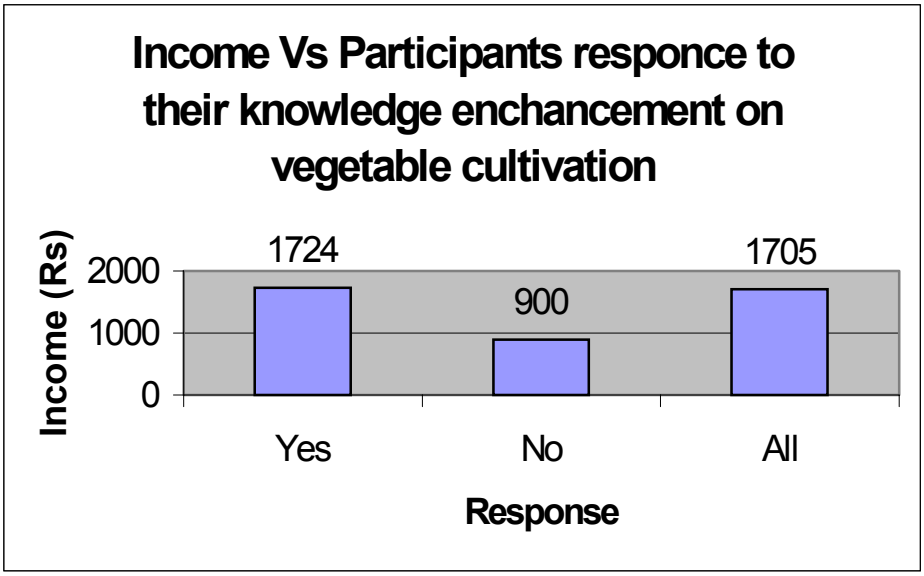
It was worthwhile to observe that 77% percent of the respondents felt that they have gained and learnt more about vegetable cultivation that clearly reflects on their income generated. The income generated by the respondents who acknowledges having learned Vegetable cultivation had an average of Rs. 1669/- worth of yield whereas those who did not learn had their average income less by 60% at Rs. 1007/-.



100% of the respondents felt that they learned about drip irrigation as well as the art of cultivating with less and limited amount of water.

Knowledge Enrichment (Focus Group Discussion)

98% of the participant felt that they have gained and learnt new things about vegetable cultivation. It was observed that those who did not learn anything about vegetable cultivation had an income of Rs. 900/- while those who learned ware have an average income of Rs. 1724/-.i.e they were almost double in the income range.



Continuity in Future (Questionnaire Survey)

100% of the respondents replied in affirmative sense when asked whether they will continue using this technology in future.

Continuity in Future (Focus Group Discussion)

100% of the participant said that they are interested in continuing the use of Drip Irrigation in future.

Conclusion

It is clearly evident from the survey that the use of this 100 sq. mtr. Vegetable garden kit combined with the knowledge about better cultivating practices brings fruitful results under the harsh conditions of water scarcity. This, apart from adding to the nutritional value of family generates an extra income, which can be used for the development of the family.

Though the two methodologies adopted to conduct the survey had minor differences in their figures, but pointed to the same conclusion.

Highlights of the survey:

1) Average increase in income/savings of Rs. 1500/- or more
2) More than 90% grow more than one crop
3) Yield almost equally divided for sale and home consumption.
4) 100% learned about drip irrigation and would continue using it in future.
5) Open mind to adopt new technologies and methods for cultivation yields fruitful results.