Evaluation Study on Suvarna Bhoomi Yojane Horticulture Department

Executive Summary

In the 2011-12 budget speech, the Chief Minister of Karnataka announced a special programme called 'Suvarna Bhoomi Yojane (SBY)'. This was for the revitalization of 10 lakh small and marginal farmers in the State including the SC and ST families. The programme envisaged change from low value crops to high value crops, adopting improved cultivation practices. Horticulture department intended to know the field usefulness and efficiency of the scheme through a Rapid Assessment of the programme and that is the basis of this evaluation.

1. Survey Methodology

To elicit information required for the assessment, three data collection formats were developed to collect information at three levels – Horticulture Department, field farmers and beneficiaries. The survey covered 11 districts, covering all the agro- climatic zones of Karnataka. The survey was conducted during May 2014 to July 2014.

2. Access to Benefits

a. The total number of beneficiaries accessed to the benefits in the two years of the programme (it is discontinued after that) has been over 3.3 lakhs. However, 78% of the beneficiaries remained in the programme, availed both the installments of financial aid, while 22% discontinued the programme after taking the first installment because of various reasons.

b.District wise, lowest number of beneficiaries is reported in Kodagu district (2362) and the highest number of beneficiaries is reported in Hassan district (31884).

c.The access to benefits by social groups indicates that 14% belong to SC, 6% are of ST and 80% of other social groups. The farmers of other social groups include communities other than SC and ST, but belong to the small and marginal farming category (with land holding up to 5 acres).

3. Number of Ineligible Farmers

Definition of Ineligible farmers: If beneficiary farmers, after receiving the first installment of financial aid, do not cultivate their land any further or deviate from the agreed crop of cultivation, then the second installment of financial aid is not given to the farmer. He / She is referred to as an ineligible farmer".

- a. Some farmers, after taking the first installment of the financial aid did not continue in the programme due to various reasons and became ineligible for receiving the 2nd installment of financial aid (refer section 6.9). In the two years, ineligible farmers declined from 24% in the first year to 19% in the second year. The percentage of ineligible farmers is highest in Udupi district (80%), and lowest in Kodagu district (1.35%).
- b. The percentage distribution of ineligible farmers across different social groups indicates that of them 16% belong to SC, 7% ST and 77% other social groups. Within the social groups, the percentage of ineligible farmers are 28% in SC, 26% ST and 16% other social groups.
- c. The relationship between number of beneficiaries and the number of ineligible farmers is statistically significant across the districts at 95% confidence level with a p value of 0.049 and R Square = 0.1313.

4. Extent of Area Covered

a. The programme covered nearly 4.5 lakh acres over the two years, with first year coverage of 3.25 lakh acres (73%). The distribution of area covered across different social groups show that 15% of the area belonged to the SC, 8% to ST

and 77% to other social groups. During the second year of the programme, the coverage of land belonging to SC increased from 12% in the first year to 25% and of the ST the area covered increased from 6% to 13%.

b. The average area per beneficiary farmer covered under the programme is 1.34 acres. It was 1.4 acres in the first and 1.18 acres year in the second year (Table-5.12). Across different social groups, the average area per beneficiary farmer covered for SC is 1.52 acres, ST 1.69 acres and 1.28 acres for other groups. However, the upper limit of up to 2 acres as per the guidelines has been followed.

5. Cropping Pattern

The cropping pattern during the programme years indicates more than half of the area covered by vegetables, followed by 22% of the area under fruits and 14% under horticulture crops. The area under vegetables increased from 50% to 60% during the programme years, horticulture crop area increased from 12% to 19% but a decline in the fruit growing area from 25% to 15%. The rationale for this variation in the area is that the number of farmers practicing vegetable cultivation increased from 55% to 63%, 14% to 16% for those practicing horticulture crops and those practicing fruits declined from 19% to 15%.

6. Profile of the sample beneficiaries

The study covered 11 different agro-climatic zone districts, 21 taluks and 36 hoblis. The total number of sample farmers covered has been 526, who are spread over 145 villages. 75% of the sample beneficiaries are doing cultivation themselves, the remaining 25% beneficiaries who have received financial aid under the SBY programme are not directly cultivating. In most of the cases (22%), either their sons or husbands are cultivating, whereas in few cases other relatives are cultivating the land. The social composition of the sample farmers covered

comprises of 52% OBC's followed by SC (19%), General (17%), ST (7%), Muslims (3%) and Christians (2%).

7. Land Holdings

a. The distribution of sample farmers by different landholding groups indicates that except for the 1% of the beneficiary farmers, all beneficiaries belong to the small (49%) and marginal (50%) farming group. The cropping intensity prior to the introduction of the programme was 88%, under the programme it is 61%. Across different land holding groups, it is seen that the cropping intensity under the programme is less in higher landholding groups when compared to the marginal and sub-marginal farming groups. The inequality index estimated using Gini index, shows that the inequality in area cultivated before the programme is 0.2991; during the programme it is 0.1592 endorsing the fact that the programme focused on small and marginal farmers with a ceiling of 2 acres.

b. The farmers are practicing both mono cropping and mixed cropping of many food and commercial crops. The chief mono crops cultivated before the introduction of the SBY programme are tomato, green chilli, paddy, jowar, onion, banana, sugarcane, cabbage, cotton, groundnut, flowers, coffee, tur, ginger, maize, ragi, soya bean, pepper, betal leaves, turmeric, green gram and mango. These mono crop cultivation is reported by over 400 sample farmers (75%) covering an area of over 75% of the programme area. The cropping pattern during the implementation of the SBY programme shows a partial shift in the area under black gram, green gram, jowar, maize, cotton, sugarcane, paddy to vegetables, green chilli, onion, pepper and other horticultural crops. It is seen that the shift in the area from food crops to vegetables & horticulture crops is varying from farmer to farmer and is in the range of 16% to 100%.

8. Financial Inclusion

One of the objectives of the SBY programme is that the beneficiaries get the incentives directly credited to their bank accounts. All the beneficiaries were to have a bank account in their name in any financial institution. If the beneficiary did not have any bank account, the field farmers in their area have helped to open one account. It is seen that all the sample beneficiaries have opened the account in institutions near to them such as commercial banks, PLD Banks, RRB's, Agriculture Cooperative Societies, Co-operative Banks and Post Offices.

9. Release of Financial Aid

a. For the 2011-12 beneficiaries, the time of release of first installment has been July 2011 to September 2011 and the second installment was from January 2012 to May 2012. For the 2012-13 beneficiaries, the release of first installment of financial aid has been mostly during August 2012 to December 2012 and the second installment during January 2013 to June 2013.

b. The average number of days taken for getting the two installments has been 216 days for the 2011-12 beneficiaries, and 156 days for the 2012-13 beneficiaries indicating improvement in the delivery system with passage of time. It is reported that 19 (4%) of the 526 sample farmers did not get aid because of various reasons. Lack of information about the programme and personal use of the 1st installment of the incentive are the two major reasons, while economic problem for cultivation, crop failure, water scarcity and absence of crop management led to ineligibility of farmers.

10. Income

The highest average income per acre is derived from turmeric followed by cabbage and ajwain (*Trachyspermum ammi*). About Rs.18000 income per acre has been derived from the sale of crops. The inequality in income generated by the beneficiaries under the programme estimated using Gini index is 0.3942.

11. Usefulness

- a. 90% of the sample farmers have reported that they continued with the same crop for the subsequent year also, but 10% (50) sample farmers reported that they did not continue with the same crop. Among these, 32 farmers did not do any cultivation and 18 other farmers who did partial cultivation of their land holding under the SBY programme continued with the same crops cultivated before the SBY programme such as chilli, cotton, sugarcane, groundnut and ragi.
- b. Majority of the sample farmers perceived that the programme was implemented well. They want it to continue as it is beneficial to small and marginal farmers.

12. Feedback of Implementing Personnel

- a. The programme used field farmers who were appointed at hobli level and reported to hobli level officers of the horticulture department for the implementation of the programme. Since the programme is discontinued in 2013-14, field farmers are not functioning in the department. However, the study team, with the help of the horticulture department personnel, could track 13 of the 36 field farmers in 7 districts. Also, 50 department personnel of various levels were interviewed to get the feedback on the programme.
- b. The programme implementation followed the guidelines specified for various activities right from the selection of beneficiary to the release of the second instalment of the financial aid. The process followed were, providing prior information about the programme to the farmers, calling applications, scrutinising the applications and selecting all eligible farmers. In the first year of the programme all the farmers who had applied were selected. In the second year it is reported that in Haveri, Arasikere, Raibagh, Chikmagalur and Hassan taluks, selection was done through lottery because the number of applications was more than the target beneficiaries.

- c. All the field staff felt that the programme has been very useful, particularly for the small and marginal farmers who were provided with financial aid for start-up activities without any accountability. There were some instances where the farmers did not make use of the first instalment and became ineligible. It is seen that the ineligible farmers in all the districts and varied from around 1% in Kodagu district to as high as 80% in Udupi district. One of the uniqueness of this programme is the direct transfer of financial aid into the bank accounts of the beneficiaries.
- d. Though the programme started with the objective of helping the small and marginal farmers for rejuvenating the small pockets of lands, did not reach to the full expectations due to inherent drawbacks in the guidelines and implementation processes. These relate to instances such as big farmers also getting benefits (as seen in the sample, 1% are big farmers were selected as beneficiaries in this programme), financial aid based on the land held by the farmer rather than the consolidated land held by the family, more than one beneficiary from same family getting the benefits and after getting the first instalment farmers not cultivating crops. There is no accountability on the part of the farmer after the receipt of the first instalment.
- e. The implementing personnel reported that the following factors were responsible for the farmers becoming ineligible after taking 1st instalment:
- . The 1st instalment of the financial aid is used for personal purposes.
 - Crop damage is one of the major factors responsible for ineligibility.
 Due to small holdings and lack of cultural operations, crop growth
 fails and the farmer stops at that stage. The second instalment is not
 given as he/she had discontinued the cultivation.

- Crop deviation is another reason for ineligibility. This is when the Farmer agrees to a crop as per the guidelines, but after taking the 1st instalment deviates in crop cultivation.
- The guidelines clearly state that for the 2nd instalment to be released, the photographs showing the location of the land and the growth of the crop has to be attached. In cases of early crop yields, GPS photos were not available, and hence they did not get the 2nd instalment.
- There is no clear information dissemination by the field farmers About the process and requirement at each stage of the cultivation, and for getting the aid particularly the 2nd instalment. This is because field farmers visits the farmer only two times in their farms once in the beginning at the time of release of 1st installment to ensure startup activities, and the second time for taking GPS photo for the release of the 2nd installment. The main reason attributed by the field farmers for these limited visits is the location of the 300 farmers in different directions. This is more difficult in Hassan, Chikmagalur and Kodagu districts where the habitations are dispersed. In Ramdurg taluk of Belgavi district, only two field farmers managed the programme in three hoblis.

13. Recommendations

The programme *is recommended for continuation* with the following changes in guidelines:

1. The field farmer to beneficiary farmer ratio and the extent of area falling within the services of a field farmer needs to be minimized so that he / she (field farmer) is able to have intense inspections and monitoring of the activities in the beneficiaries lands. The field farmer to the

- beneficiary farmer ratio should not be worse than 1:75 and the area under a field farmer may generally include a maximum of five villages.
- 2. Such crops as would yield results in 2 years or more should not be permitted to be covered under the programme, as second installment has to be then released without any yield occurring from the new (high value) crop and its sustainability on the land remains unknown.
- 3. The objective of the programme is to increase yield from agricultural lands and shifting to high value crops. The insistence of the programme to have a complete change of crop is neither always feasible nor desirable. The objective of the programme can be achieved by intensive multi-level cropping by putting crops like vanilla and pepper along with coffee, vanilla with betel palm etc. This is what is practiced and proven to be feasible in malnad and coastal areas. The multi cropping component should be made an eligible activity in the programme, when and if continued.
- 4. All the cases where the aid were used (in the programme implemented)

 For personal purposes and / or purposes other than what it was intended for, need to be taken cognizance of, dealt with under law and recovered, lest the aid becomes devoid of accountability and beneficiaries intentionally misuse it or do not use it. In the continuation of the programme, it should be explained and emphasized that the use of the aid will be dealt with very seriously.
- 5. The programme has to be continued for a minimum of five years with the financial aid to the beneficiaries are given in varying percentages, with certain percentage held back each year. At the end of the fifth year all the backlog amount is given along with the final installment. This is because it will be impractical and illogical to assume that a farmer would change

the decades or centuries old cropping pattern merely because the government has promised aid for two years. A longer period of aid with an assurance to get the highest aid in the last year will motivate the farmer to involve in the programme till the time he/she is comfortable and knowledgeable about the new crop. This will result in least number of ineligible farmers.

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