

Managing Topographical Constraints and Taking Advantage of Climate for Paddy and Vegetables Area Expansion



Background and Objectives

Arunachal Pradesh is a mountainous region with undulating hilly terrain all over. Cultivable flat land is very limited. 40% of the farm land in Arunachal out of the total gross crop area of 282000 ha is still under Jhum cultivation. Land leveling terracing with bunds can wean people away from the practice of shifting cultivation which, because of shortened cycles, is detrimental to the environment. Expanding agriculture by land terracing, practiced with minimal landscape planning and mostly through human labor is therefore being taken up in the State under RKVY.



Arunachal Pradesh also is climatically suitable to produce off-season vegetables (OSV). Off-season vegetables are cultivated before or after their normal season of production or by adjusting planting time, by selecting and improving varieties and / or creating controlled environment. Taking advantage of the varied climatic zones from mild tropical to temperate and alpine in Arunachal, which makes temperate high hill areas of Arunachal Pradesh suitable for off-season vegetables, programme of promoting off-season vegetable (OSV) production, was taken up under RKVY. OSV farming can be an important source of income for farmers of these areas. There is immense inter and intra state marketing potential for surplus off-season produce of these areas. The produce can feed markets in the foot hill areas of the state besides the plains of neighboring states like Assam.

Intervention

Subsidy linked area expansion programme through land terracing program was taken up in the year 2009 under RKVY with a total outlay of Rs. 2.55 Cr. It was continued in the year 2010-11 with an

outlay of Rs. 2.75 Cr. Food deficit border areas of the state with 10-20 pc slopes were given priority under the program. For a unit of 1 ha area under land terracing, a subsidy of Rs. 50,000 was provided. In the year 2009, when the program was launched, it was envisioned that the program will reach approximately 500 beneficiaries and will result in expansion of net sown area by 0.15%.

For achieving maximum impact of the program, convergence of land terracing program was made with various state and central sector projects being undertaken by allied departments such as rural works department and department of horticulture. For example, beneficiaries of land terracing program were encouraged to set up horticultural gardens instead of paddy cultivation, under technology mission.



In convergence with Technology Mission on Horticulture, Department of Agriculture implemented a project to boost production of off-season vegetables during the year 2009-10 (implemented from August' 2010) with the support of RKVY. The

project supported 90 beneficiaries in six select districts. The beneficiaries were provided with seeds, organic manure, bio fertilizers and bio pesticides. Department of Horticulture, Government of Arunachal Pradesh also initiated a project under RKVY in the same year to provide low cost poly houses for vegetable cultivation. A total of 60 beneficiaries were provided with low cost poly houses with a total outlay of Rs. 27 lakhs.

Outcome

A quick evaluation of the impact of area expansion by land terracing indicates that the program is helping marginal farmers. The State Agricultural Plan envisages an investment requirement of Rs. 90 Cr for land terracing during the 11th Plan. Convergence of efforts by state departments like department of rural works will be of paramount importance in the years to come.

There is substantial demand for assistance under this programme as reflected in large number of applications recommended by village and Anchal Panchayats. The growth impact of the project is likely to be long lasting and multifold. The newly terraced lands are being brought under irrigation by many farmers which can potentially lead to increase in cropping intensity in future.

Similarly, off season vegetable programme has also made its impact. As per the estimate of the department of Agriculture, the RKVY intervention in the state has lead to an increase in Area under vegetables from 22135 hectare to 22225 hectare (approx. 0.41%). Estimated increase in production is from 94.148 MT to 94.523 MT (approx. 0.41%).

Banking on climatic advantages: Offseason Vegetable cultivation



“I am grateful to the department of Agriculture for subsidy under RKVY. The cost of labor in my area is very high and it’s difficult for small farmers like us to manage funds for undertaking manual land terracing work.”

-----A beneficiary of area expansion by land terracing program,
Lower Subansiri Dist.

“Our group’s offseason vegetable production has gone up substantially after we started using poly houses supported under RKVY to cultivate tomato, cabbage, chilly etc. Cultivation under poly houses improves quality of produce and permits early harvesting. This year we got better price of tomato @Rs.20 per kilo because of early harvesting. The productivity of tomato has also increased to 20 ton / ha. “

Smt.Kago Kampu
Siuro Women Farmers Club, Ziro, Lower Subansiri District

The interventions under RKVY have brought in the much needed incentive to vegetable farmers in Arunachal Pradesh and the same are likely to augment production. Off-season vegetables of Arunachal like tomato have already attained a brand and it is regularly entering markets in Assam.

“We are regularly purchasing offseason (Produce beyond the month of April up to November) tomatoes from around 10 villages located in Rupa area of West Kameng District (Near Bomdila) of Arunachal Pradesh for distribution to various markets in upper Assam. The business is profitable for us. The production is substantial and seems growing in the last few years.”

Mr.Prafulla Saikia
Golaghat, Assam