EXPECTED OUTCOMES

This project is a need based project which aims to increase the individual income, to generate self employment and to increase the agricultural productivity in the villages of Vamanapuram, Nedumangad, Chirayinkeezhu and Pothencode blocks under the IWMP. This project will be focused on multi approach activities which create an employment opportunity in their native villages for sustaining their income and check the migration, which became a key to defeat the present problems. Project will not only focus on create employment opportunity but also focus on the sustainable use of natural resources by using latest appropriate technology and strengthening the local leaders through capacity building and training, which ultimately ensure the sustainable livelihood of the people of the project area. The details of expected outcomes are given below.

Employment

One of the prominent features of watershed program is to create self sustenance to stake holder in terms of livelihood and increase in employment opportunities is one of the benchmark that can unravel the effect of watershed. Watershed creates employment opportunities during the work phase for labour intensive activities like construction of gully plug, earthen dam, farm bund, check dam, check wall and through the asset created under watershed program have a direct impact on agriculture and natural resource development. Livelihood for self employed, wage labour and income generating activities have ample scope for employment generation. As the net employment increases, the per capita income of agriculture, animal husbandry and other allied activities will also increase.

Expected Migration Checked

Watershed development works can generate new opportunities in local area through the physical treatments of the watershed activities and increase the production of agriculture produces through adopting updated/ new techniques. The number of seasons under cultivation will increase as sufficient ground water level is available to the farmers in the winter and summer season. The farmers will be able to take second and third crop in their agriculture land. Hence the watershed development increased demands for labour. This will lead to decrease in the number of seasonal migration from the area.

Ground water table

In the presence scenario the ground water level of open wells varies from 10 meter to 16 meter, from village to village. The groundwater has gone down due to rapid urbanization and maximum ground water harvesting without any sustainable measure. The watershed activities like roof water harvesting, well recharging, rain water harvesting pits, staggered trenches, etc. will help in ground water recharging under this project and it is expected that the ground water level will come up and reach at 8 to 12 meter.

Drinking water

The villages in the project area totally depend upon hand pump and open well for drinking and other domestic activities. The availability of water is only for 10 months at maximum. The activities of watershed and the linkage with the Jalanidhi will increase the ground water table so that the expected status of drinking water will increase. Comparative status of drinking water between pre-project and expected post project are furnished as under.

Expected Crops Yield.

Due to additional availability of water, farmers of the project area will be able to take more crops in their available land. Even after taking rainy season and post-rainy season crops into consideration, they will get a good price for vegetables in summer also. The productivity will also increase due to the use of updated techniques.

Horticulture

The watershed area holds good potential for horticultural activities. It is expected that due to increase in horticulture plantation area, the production will go up fetching more money in the hands of the farmers which will add to the other allied economic activities. It is also proposed to diversify horticulture activity by bringing more area under money fetching horticulture plants like Rambutan, ……..,etc. The expansion of horticulture in the area will directly increase the income levels of all the household engaged in the horticulture activities. There will be significant increase in the area covered under horticulture.

Livestock

Milch-animals include cow and buffalo in the project area. Productivity of the cow is 3 liters per day where as the buffalo give 4 liters of milk per day. Advanced breeds like Jersey and other improved species will be promoted in the watershed area in order to

enhance the milk production. The introduction of the nature fresh model is expected to increase the quality and quantity of milk production. Due to the various interventions, the productivity will be increased to 5 and 6 liters respectively.

Quality and quantity of fodder

With the distribution of good quality fodder seeds and fodder plants to all households involved in livestock activities, the farmers will be able to produce the required fodder intheor own lands and attain self-sufficiency in fodder. This will ensure fodder throughout the year encouraging the farmers to take up animal husbandry activities on a broader scale to improve their living conditions. .

EXPECTED OUTCOMES OF THE PROJECT

Sectors	Expected outcomes	Indicators
Agriculture	improved irrigation	Increment in gross irrigated area
	Enhancement in agriculture production	Increment in quantity of agriculture produces.
	Good organic farming	Number of functional vermi compost units
Horticulture	Enhancement in crop production	Rise in quantity produced
Natural resources	Pasture land development	Increment in pasture land area
	Improvement in water resources	Physical existence of the water bodies.
Animal husbandry	Dairy development	Number of dairy farming units
	Improved bee keeping practices	Number of farmers with commercial production of honey
Micro enterprises	Improvement in women's status	Increment in income of women and their institutions (SHGs)
	Nursery Rising	Physical existence of new nurseries
	Honey and fruit processing and unit	Well functioning honey and fruit processing units
	Better market facility	Number of well functioning vegetable and fruit collection centers, milk and honey preservation units
	DTP centres	Physical existence of DTP centres
Development of BPL families	Improvement in economic status of BPL HHs	Increment in the income of BPL families.
	Improvement in social status	BPL families will have ownership over the generated resources.

PRE-INTERVENTION AND EXPECTED POST INTERVENTION STATUS

Sectors	Present Status	Post Intervention Status
Agriculture	Agricultural products are being practiced as a major livelihood option for the watershed population	Sharpincrease in the area under agriculture cultivation and increase the socio-economic status of the population in the watershed area.
Horticulture	Horticulture is the major livelihood activity of the villagers, which is dominated by banana and vegetable production.	The cultivation area under horticulture production will be increased with diversification of crops and quality. It will also increase the economic status of the population.
Processing and Marketing	Right now there is no structured marketing procedure for the products. Also there is no collection centre to store and gradation of the products.	The marketing system will be strengthened, and linkage will be established with corporate houses and as a result of the collection centre available, which further prevents loss of products. Farmers will get competitive price also.
Cattle Management	Low level of awareness and expertise in cattle management.	Increased awareness and expertise about cattle management.
Milk production	Current Milk Production per cow is 3 litres per day.	Milk production will be increased to 5 – 6 litres per cow as a result of increased fodder availability and balanced food and scientific Technique.
Milk Marketing	Milk Production is not an income generation activity. Only for self consumption.	Milk production will become a commercial activity and the people will form a co-operative & SHG with the help of Govt. and access to t he organized Markets.
Fodder Availability	There is not enough good quality fodder available in the watershed area throughout the area.	Increased availability of cattle balanced fodder production. The households who practice animal husbandry will be able to meet the fodder requirement locally throughout the years.
Irrigation	No Irrigation systems prevalent in the water shed area at present	All the cultivated lands will be covered by digging new wells and renovating the existing ones.
Soil Erosion and Landslides and Rain Water Harvesting	Soil erosion and landslide are very prevalent in the watershed area.	The soil erosion will be checked through the creation of stone pitched constour buns and other measures. Landslide will be minimized.

Nursery Rising	Activity being practiced not in a systematic manner.	Nursery Rising will be carried out in an organized way and it will improve the economic condition of the people under the watershed area.
Bee keeping	Activity being practiced not in a systematic manner	Bee keeping will be carried out in an organized way and it will increase the income level of the community.
Mushroom	Activity being practiced not in a systematic manner	Mushroom cultivation will be carried out in an organized way and it will increase the income level of the community.
Vermi compost	Vermi Compost is not practiced. The knowledge base of the community regarding organic famring is not sufficient	Vermi Compost will be carriedout in a planned manner and income level will be increased. Community will get knowledge about organic farming. Over time, more people will go for organic framing in the watershed area.
Interventions for BPL families	There are only limited interventions which are exclusively aimed at BPL families of that area.	The livelihood enhancement programmes under the IWMP will directly benefit all the BPL families in the area and bring remarkable changes in their standard of living by creating sustainable livelihoods options.
BPL Status	At present there are 65 % BPL families in the watershed area.	The BPL status of the families will be improved and they are expected to attain the status of APL over time after the proper implementation of watersheds projects.