



Rejuvenating Lives

Chronicles of agricultural transformation on the fields of small and marginal farmers

Trees on Farm - The Horticultural Spin to Farming

Benefits

-  *Low-cost and environment-friendly activities to boost the income of small landholders*
-  *Biomass produced from forestry plants can be used for producing vermi-compost. This saves fertilizers' cost and reduces nitrous oxide emission*
-  *Vegetables provide a major nutrition source to the family*
-  *Agro-forestry offers the livestock with nutrition*
-  *Provides fuel wood from the fifth year, which can be used for domestic needs*
-  *Improvement in soil productivity*

Figures at a Glance

*As on 31st March 2020



Introduction

Natural resources management based livelihoods are pivotal to the livelihoods of small and marginal farmers in India. As a measure to consolidate and complement its crop-based initiatives, Action for Social Advancement (ASA) undertakes Agri-Horti-Forestry activities (Wadi) to further diversify the small landholder's agriculture to boost their income and provide the associated ecological and other benefits to them. Since Mandla in eastern Madhya Pradesh has high tribal farming communities, who have a special affinity with the forestry, ASA has worked on amplifying the benefits of Agri-Horti-Forestry activities with many such farmers.

The Specifics

Trees on Farm is an initiative by ASA to open up an additional avenue for enhancing the farm receipts of the small landholders. Under the Agri-Horti-Forestry activities (Wadi), a family with an acre of cultivable land is assisted in growing horticulture plants, vegetable cultivation and agro-forestry plants for fencing and income generation. Since the duration for the fruition of horticulture plants is four to five years after the plantation, they provide income-earning opportunities only after that period. Hence, high-value vegetables are grown in the unused spaces between the plants to enable the farmers to earn an immediate income. The boundary of the field is lined with agro-forestry trees as a means to protect the main field while offering major nutritional support to the domesticated livestock. Besides, these trees allow the growth of creeper vegetables around them as these vegetables require a stable means of support for their growth. The creeper vegetables also act as a vital source for a family's nourishment. The collective income from this activity starts paying a farmer an amount of INR 15,000/- to INR 20,000/- from the first year and reaches above INR 25,000/- annually after five years. These earning acts as a major factor in mitigating the poverty of a family and become a viable source of livelihood.



A Blend of Fruits and Vegetable Farming is the Recipe for Growth

One of the early entrants of the ASA's Trees on Farm program, Dhanol Partek, a 47 years old tribal farmer from Dungariya Village in Mandla district was provided 30 mango and 28 amla (Indian Gooseberry) saplings to be planted on 1 acre of his plot under the guidance of ASA in 2014. While he took good care of the saplings, he also started growing vegetables in interspace in all the three farming seasons, which earns him INR 25,000/- in a year. The long period of nurturing the mango saplings bore positive outcomes as he got his first harvest in 2018 when he was able to get a good quality yield of 2.5 quintals, which he sold for INR 12,500/- . Forced to move out of his village for work for a major part of the year earlier, the Trees on Farm initiative has brought a period of welcome reversal for him as he keeps busy on his farm through all the farming seasons. While he is happy with his improved income, he wants to further intensify the vegetable cultivation by including newer vegetable crops such as mushroom farming..

Kantibai Pandro, another farmer from Dungariya Village in Mandla district also went through the same journey of joining ASA's Krishak Pathshala and visiting Betul district to witness the Wadi program being implemented by BAIF before coming onboard of horticulture with agriculture program in 2014. She faced a severe shortage of irrigation for which ASA facilitated a dug well construction through a government scheme and also installing a drip set on 25 decimals of her 2.5 acres plot. Alongside mango and amla plantation, Kantibai grew vegetables on 1 acre and in reaming 1.5 acres, she started producing paddy, wheat, and maize. The vegetable sale brings home INR 30,000/- and an almost similar amount is earned through the sale of cereal crops. The first harvest of mangos last got spoilt due to adverse weather but she was able to earn INR 7,500/- by selling 1.5 quintals of produce. She is hopeful of a higher production in the future. Kantibai has also taken up goat farming and bee-keeping through ASA's help, thus earning a decent income today. She is happy with her efforts to diversify her farming and is setting an example for other farmers to follow suit since she has become one of the Board of Directors in ASA promoted Maheshmati Tribal Farmer Producer Company Ltd.



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Ratiabai Bhagatsingh Warkade from Paundi Mal village in Mandla district is another farmer deriving the benefits of horticulture with an agriculture program. Ratiabai was a member of Krishak Pathshala (Farmers' School), wherein she was made aware of various modern farming techniques and other useful agricultural related information. While attending the sessions organized by Krishak Pathshala, she joined an exposure visit to Betul district in 2013 to see the Wadi program being implemented by the non-profit, BAIF, which piqued her interest as she saw the earning potential and other advantages offered by the program. Encouraged by the visit, Ratiabai immediately joined the horticulture with agriculture program and planted mango and amla saplings on 1 acre of her total landholding of 4 acres. She also cultivated vegetables such as tomatoes and eggplants alongside, which brings her INR 25,000/- annually. In 2018, she got the first harvest of 6 quintals from the mango trees and earned INR. 30,000/- by selling them. Ratiabai also adopted other irrigation measures such as shallow bore well and drip irrigation on her reaming plot with ASA's help, which helps her earn a total of INR 1,00,000/- in a year which is four times the amount which she earned before the ASA's interventions. The enhanced earnings have helped her procure quality inputs in a timely manner and she also got her grandchildren admitted to a better school providing quality education

*"The Wadi program of ASA has changed the face of my farm and it yields me a decent earning today, a scenario unimaginable for me until a few years back. The earnings have enabled me to bring improvements on my farm as well as my life," **Ratiabai Bhagatsingh Warkade, Trees on Farm Program beneficiary.***