

Impact Story of Barapalli village in Nayagarh dist. of Odisha

Climate Resilient Indigenous Seed System Project

Project Implemented by NIRMAN, supported by SWISSAID

Barapalli is a tribal village situated about 4 kilometers from the Dasapalla town in the Nayagarh district of Odisha. It comes under the Sariganda GP. There are



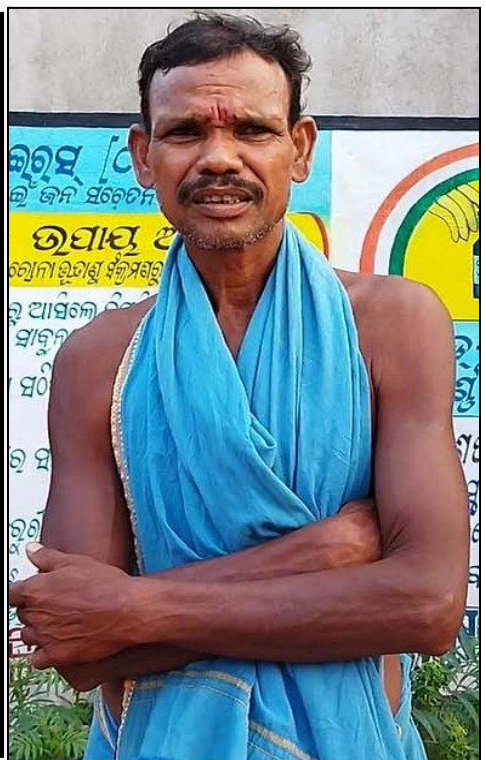
36 households in the village of which only 2 are scheduled caste, the rest being Kandha tribals. They are marginal farmers, and have preferred to manage with their limited resources rather than out-migration. Leaf-plate stitching and few other NTFPs add to their income.

In September 2019, NIRMAN (www.nirmanodisha.org) started introducing the concept of climate resilient agricultural practices in the area with support from SWISSAID; and Barapalli was one of the intervention villages selected under the programme. The villagers had long discontinued most of their indigenous farming practices to adopt the glamorous high yield agriculture that inherently devalued the indigenous practices as unscientific, but they had hardly realized how this has increased their dependency on the market and how it has taken away their food sovereignty. They had to invest more on the high yield varieties that were more susceptible to a failure in case some unfavorable change in the agro-climatic conditions occurred. Hence, it was a double

diversion of their meager income: higher investments in agriculture, and higher spends on purchase of food grains(like pulses) & vegetables etc. from the market. NIRMAN soon took up a seed mapping in the village which helped identify only about 4 indigenous rice varieties and millets were almost forgotten. When the villagers were sensitized about how some of the best indigenous practices made their forefathers more resilient against the odd changes, be it climatic or health and so on; the senior citizens of the village endorsed this fact based on their own experiences. After convincing the village, NIRMAN then arranged an indigenous seed festival in the area where different villages shared their indigenous stocks, and interested farmers got seeds from here. Not only that, the villagers were also convinced to grow different vegetables so as to ensure richness & diversity in their food basket on a daily basis, for food & nutritional security. As a result, Barapalli now grows 12 indigenous rice varieties such as *chinamali*, and village women cherish the different vegetables they now grow.

Learning from the villagers...

When asked as to why & how NIRMAN's intervention is important for the villagers when the government has enough support systems including the 1-rupee rice, Purnachandra, the Ward Member, explains that the villagers were neither way after adopting the high yield rice because neither they could afford the high investments (which failed to get the optimum production) nor could go back to the indigenous varieties. The soil was losing its life because of the chemical farming, and seasonal farmland fishes became a thing of the past. He further says that the roots of indigenous paddy go much deeper than that of the HY paddy, which makes the former more resilient against certain adverse conditions.



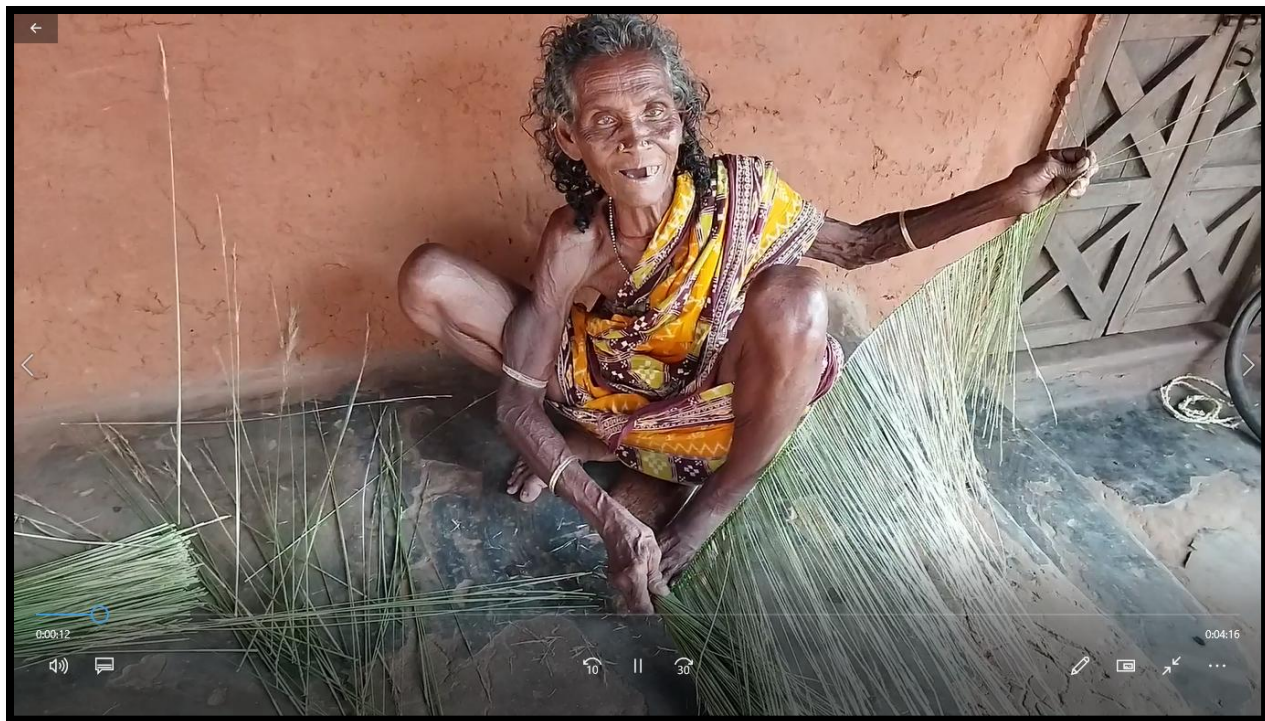
When the pandemic posed challenges to NIRMAN's project intervention in the area, the organization soon adopted a simple method of turning the crisis into an opportunity, and provided 'seed relief' to the intervention villages. The seed packets mainly consisted of three millet varieties(*mandia* or ragi, suan or little millet, and janara or sorghum), alongwith pigeon pea(*kandula*) and some vegetable varieties. This significantly helped

the villagers enrich & enhance their crop diversity with resilient and more sustainable varieties most of which used to be a part of their indigenous food systems a generation before. Taking this forward, the Barapalli villagers added *bajra*(pearl millet) to the diversity after they managed to get its seed from some other village.

NIRMAN's interventions just did not stop here. The villagers were also taught the best practices of modern farming such as line sowing and organic pest management, as a result of which the villagers could well notice how line sowing could ensure a pretty healthy growth of their indigenous paddy as well as millets, as opposite to the conventional transplantation practices; and stopped the use of chemical pesticides even in the brinjal crop. Now, 33 households have grown indigenous rice whereas all 36 households have started mixed cropping.



Ambika stands proudly near her field which is to her right, and where line sowing, organic cultivation, and indigenous paddy have proved to be an integrated success, contrary to the crop to her left that is conventionally grown. NIRMAN has also taught Ambika to grow pulses such as black gram(seen in the picture) and green gram on the sides of the paddy field so as to make optimum use of the resources.



An old lady making the thorn broom. It was senior citizens like her who played an important role in convincing the villagers to revive the cultivation and use of millets, as they know its value.

The change in Barapalli is a silent one far away from any propaganda, and NIRMAN's intervention villages like this (some of which are quite interior, without any motorable roads) are unknowingly giving shape to the prototype of a model that, instead of an intervention to increase the cash income, is humbly trying to restore as well as improve people's food sovereignty with their own food-, nutrition-, and health security as the primary target and economic betterment as the secondary outcome. With decreased investments on agriculture and food items, the villagers have been able to save their money; and at the same time are in the process of establishing a resilient & sustainable production system in place that gives them surplus production with lesser inputs & investments, and they are free to sell this surplus. Of course, it needs few more years to formalize this humble model; and it is too early for the villages to expect a special price for their organic vegetables and indigenous rice; but gradually they are upgrading their vision thinking to achieve better in the long run. Some seasonal challenges particularly water scarcity during the summer months still need some additional planning for a comprehensive and round-the-year wellbeing of the villagers. In the meantime, one thing is quite clear that the target villagers are already capacitated enough to atleast

continue the improved agri-horticultural practices, even if the existing project support ends without any further sponsorship in place.



Various millet crops in line sowing(Barapalli). The healthy growth is remarkable.

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