



EFFORTS OF TRIBAL FARMERS IN CONSERVING INDIGENOUS PADDY VARIETIES

A Case Study from Dumbriguda Mandal of Alluri Seetharama Raju District, Andhra Pradesh

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The total geographical area of Alluri Seetharama Raju (ASR) district spans 12,251 square kilometers, encompassing 22 mandals and 242 grama panchayats. This district is distinguished as the largest tribal-populated area in the state, home to predominant tribal communities such as Kodareddy, Bagatha, Valmiki, Konda Dora, Nuka Dora, Kotias, and Konda Kammara. The tribal population constitutes 82.67% of the district's total population. These communities reflect a rich cultural heritage and are integral to the district's socio-economic fabric.

The primary income sources for the tribal communities are derived from Coffee, Pepper, and Cashew cultivation. In the rainfed uplands, farmers predominantly grow Millets, Pulses, and Turmeric, while the mid-elevation lands are utilized for vegetable farming. Lower lands are allocated to Paddy cultivation. According to e-Crop booking for Kharif 2023, Paddy was cultivated on 1.23 lakh acres in the district, contributing to 3.7% of Andhra Pradesh's total paddy cultivation. Over the years, more than 90% of the farmers in the district have transitioned to hybrid Paddy varieties due to promotional activities by the agriculture department. Numerous short-duration hybrid

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varieties have been introduced in tribal areas over the last two decades, significantly impacted on farmers to use chemicals.



With the support of SOVVA and SAGARA Gram Panchayats, WASSAN conducted a participatory planning exercise involving locally trained tribal youth, selected by ward members from their respective habitations. These youth were trained by WASSAN in E-mapping techniques and assessing the natural farming practices within the SOVVA and SAGARA Gram Panchayats. Through this planning exercise, it was identified that approximately 45 farmers across these two Gram Panchayats are actively cultivating 13 indigenous paddy varieties.

Senior farmers such as Lokkoyi Appalaswamy, Thangula Ananda Rao from Karakavalasa, remain steadfast in cultivating local seed varieties despite the widespread availability of heavily subsidized hybrid seeds. These farmers emphasize the superior qualities of indigenous varieties, noting their better taste, aroma, storability, and high fodder value. They are also aware that hybrid seeds are more susceptible to pests and diseases, making local varieties a more resilient choice.



Farmers in Karakavalasa village cultivate paddy across 18 acres of streambed lands, which are highly prone to heavy flooding. They explained that short-duration paddy varieties cannot withstand prolonged submergence in these conditions. In contrast, long-duration indigenous varieties, which grow up to 4 to 6 feet, are well-suited for such environments due to their resilience to flooding.

The farmers raise paddy seedlings aged between 45 days and 2 months, which remain pest-free and do not require fertilizer application. They begin their nurseries following the local ritual *Soyit Porob* (a seed festival) in the last week of April. Transplanting is carried out in June or July, and the harvest is completed by the last week of November.



In 2022, WASSAN documented the passport data and collected seeds of 13 indigenous paddy varieties from farmers in the region. As many farmers cultivated mixed paddy varieties, panicles were carefully collected directly from their fields with their active involvement. The indigenous varieties collected included:

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| <ol style="list-style-type: none"> 1. Basna Soppur 2. Budama Dhanyam 3. Desi PeddaDhanyam 4. Desi Rajmudi 5. Erra Dhanyam 6. Gudum Dhanyam 7. Isukaravvalu 8. Jojorki Dhanyam 9. Master Dhanyam 10. Nalla Dhanyam 11. Pasupu Sannalu 12. Sor Dhanyam 13. Tetam Dhanyam | |
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In 2023, Biodiversity Blocks (BDB) were established in Karakavalasa village to facilitate the purification and multiplication of eight indigenous paddy varieties. Crop-cutting experiments conducted in these fields showed grain yields ranging from 15 to 18 quintals per acre, slightly lower by two quintals compared to hybrid varieties. Nevertheless, farmers continue to prefer these indigenous varieties for their aromatic qualities, exceptional taste, and the

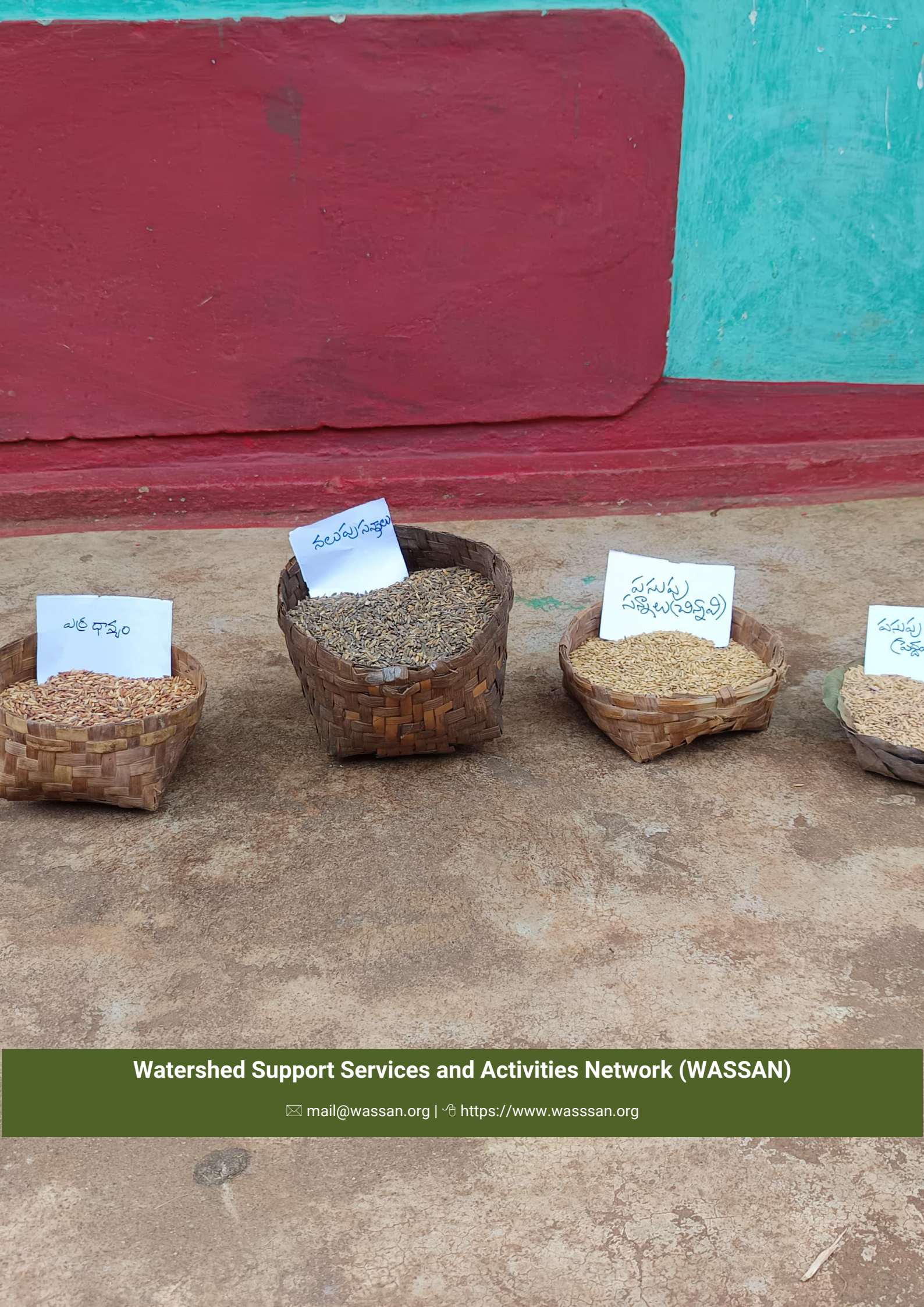
premium fodder they provide for livestock, enhancing their overall value.

According to local women, *Tetam Dhanyam* is ideal for preparing LEMON RICE and BIRYANI due to its unique flavor. *Isukaravvalu* is prized for its distinct aroma, while *Pasupu Sannalu* produces thin, easily consumable grains with a delightful aroma, making it the most preferred variety among farmers for household consumption.

In 2024, a meeting was held with farmers to discuss the multiplication of purified indigenous paddy varieties. Following the discussions, 8 farmers expressed their interest in cultivating traditional paddy varieties using Natural Farming (NF) practices. The initiative was implemented in the fields of local farmers, including Mr. Lokkoyi Jayaram, Vanthala Mahadev, Pangi Seetharam, Vanthala Domburu, Thangula Murthy, Kolloyi Dhamodhar, Lokkoyi Balaram, Killo Monna, and Pangi Vasudev. The initiative was linked with KODIKI FPC, which plans to procure 500 kilograms of each variety from these farmers to promote and distribute the seeds further. Indigenous varieties like *Master Dhanyam*, *Erra Dhanyam*, *Nalla Dhanyam*, *Tantem Dhanyam*, *Pasupu Sannalu*, *Basna Soppur*, *Budama Dhanyam*, *Isukaravvalu* are available for sale.



Local paddy varieties are in high demand, with tourists purchasing rice at ₹80 per kilogram from outlets in the Araku Valley. Recognizing this opportunity, KODIKI FPC is now exploring avenues to enter the seed business, aiming to capitalize on the growing market for these indigenous and high-value paddy varieties. ■



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