

Success story of two farmers from Paite and Lushai communities of Mizoram

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This story is about a big change in farming in Thenzawl, Serchhip district, Mizoram. This change happened because of adoption of new type of rice variety called CAU R1 (Tamphaphou). Two farmers, Pi Lalhuzami and Pu Muana, used this variety and got great results. Pi Lalhuzami grew rice on 2 hectares and Pu Muana on 1 acre. They used scientific methods and got 5 tonnes of rice per hectare. Lalhuzami made a profit of ₹204,800, while Pu Muana earned ₹30,960. This project showed how research and teamwork can help farmers, especially women, and create better farming methods. It also inspired other farmers nearby to try these new methods. This story shows how new seeds, expert help, and hard work can change old farming ways and improve lives.

Keywords: Adoption, CAU R1 (Tamphaphou), Paddy, Rainfed

AGRICULTURE is very important for rural areas in India. However, farmers in remote places often face problems like low productivity, lack of technical help, and limited access to better crop varieties. The north-eastern states have good conditions for farming but struggle due to their isolation and lack of modern farming methods. Introducing new crop varieties through organised programmes helps connect research with real farming. When scientists work with local farmers, it can lead to big changes, not just in crop yields but also in building confidence and creating sustainable growth. A success story from Thenzawl, Serchhip district, Mizoram, shows the impact of combining advanced research with farmer enthusiasm and expert help. The CAU R1 paddy variety programme started in April 2022 and became more than just a trial; it sparked agricultural change in the area. This story entails inclusive development, involving both male and female farmers, and covers all aspects of farming from soil preparation to post-harvest management. The success

of Pi Lalhuzami and Pu Muana proves that with the right scientific support, quality inputs, and farmer dedication, agriculture can lead to prosperity.

About variety CAU R1 (Tamphaphou)

CAU R1 (Tamphaphou) is a medium-duration high-yielding rice variety developed for the rainfed wetland ecosystems of north-eastern India. The variety has gained popularity because of its adaptability, stable yield, tolerance to major stresses, and suitability for low-input farming conditions.

Journey of the two farmers

In the hilly areas of Mizoram, where monsoon rains have helped

rice fields grow for many years, farming families have always accepted small harvests as normal. Traditional rice types, passed down through families, provided food but not wealth. For farmers like Lalhuzami and Pu Muana in Thenzawl, the 2022 growing season started like any other until science offered them something new and exciting.

The Central Agricultural University started a programme to introduce a new type of rice called CAU R1. This was more than just a farming project; it was a chance to change lives. Supported by the well-known ICAR-Indian Institute of Rice Research and a team of scientists, this project showed that even in



Frontline demonstration of CAU R1 rice varieties among the rice growing farmers of Serchhip Districts of Mizoram

Table 1. Morphological, agronomic and stress tolerance characteristics of CAU R1 (Tampaphou) rice variety

Particulars	Details
Developed by	Central Agricultural University, Imphal
Collaborating institute	ICAR-Indian Institute of Rice Research
Parentage	Leimaphou × BR-1
Ecosystem	Rainfed and wetland rice ecosystem
Area of adaptation	Manipur valley and similar agro-climatic conditions of North Eastern Hill (NEH) region
Duration	125–130 days
Maturity group	Medium duration
Plant height	Approximately 100 cm
Yield potential	5–6 t/ha
Grain type	Semi-glutinous rice
Brown rice recovery	72%
Lodging reaction	Non-lodging
Shattering habit	Non-shattering
Disease tolerance	Tolerant to rice blast and bacterial leaf blight under field conditions
Pest tolerance	Tolerant/moderately tolerant to rice gall midge
Stress tolerance	Tolerant to temporary submergence and drought conditions
Submergence tolerance	Up to 7 days
Recommended season	<i>Kharif</i>
Seed rate	50 kg/ha (transplanted condition)
Fertiliser recommendation	60:40:40 kg NPK/ha
Special features	Suitable for low-input farming and performs well under rainfed subtropical conditions

Source: Central Inventory of CAU Technologies for NEH Region, (2020)

faraway parts of India, success in farming is possible.

Pi Lalhuzami, as a woman farmer in a field mostly run by men, faced gender biasedness. But her 5 acre farm and strong will impressed the research team. She received 100 kg of CAU R1 seeds while Pu Muana got 20 kg of seeds for his one-acre farm. He was an experienced farmer and had seen many new seed types before.

With the help from experts, both farmers got their fields ready more carefully than ever before. They knew exactly what nutrients the soil needed and planned the planting time to match the monsoon rains. They also planned how to manage pests months ahead. Pi Lalhuzami used more fertilisers than ever before. She applied 400 kg of urea and 600 kg of single super phosphate (SSP) on her land. She

said, 'I was worried about the cost at first. But Dr. Sharma explained how each nutrient would make my crops grow better.' Pu Muana used the same scientific method on his smaller plot. He added 80 kg of urea and 120 kg of SSP. He was impressed by how precise the advice was. It was all based on his soil and plot size.

During the growing season, the technical team visited often. They checked on both the crops and the farmers. They showed them how to spot pest issues early and how to get ready for the harvest, which was still months away. The CAU R1 plants grew in a way the farmers had never seen before. They were stronger, resisted local pests better, and did well in conditions that would have been hard for other types. The monsoon rains at the end of May were perfect for the new seeds.

The third week of October 2022 brought the much-anticipated harvest season. The expertise on post-harvest management ensured that proper harvesting and handling techniques were followed to maintain grain quality. The results exceeded all expectations, with both farmers achieving the remarkable yield.

Lalhuzami's 5 acre plot yielded an impressive 10 tonnes of paddy, while Pu Muana harvested 2.4 tonnes from his one acre plot. With the Minimum Support Price (MSP) set at ₹2,040/q, the financial returns were substantial. Pi Lalhuzami's gross return calculated to ₹2,40,000, and after deducting her cultivation costs of ₹90,000, she achieved a remarkable net profit of ₹1,50,000. Pu Muana earned a gross return of ₹48,960, and with cultivation costs of ₹16,000, his net income was ₹30,960. These figures represented a significant improvement over their previous farming seasons. Pu Muana said to everyone. 'The change is amazing. We got more crops, the grain is better, and the plants resisted local pests and diseases well.'



Growing of 'CAU R1' rice variety in the progressive farmers field of Mizoram

Table 2. Economic details of both the farmers

Farmer's name	Area (acre)	Crop	Seed rate (kg/ha)	Yield (q)	Gross return (₹)	Net return (₹)	B:C ratio
Lalhuzami	5	Paddy	50	100	2,40,000	1,50,000	1.6
Pu Muana	1	Paddy	50	24	48,000	30,960	1.58

B:C ratio: Benefit cost ratio.



Cultivation of 'CAU R1' rice variety by the local lady farmer of Mizoram



is truly measured by the lives they change, like those of farmers Pi Lalhuzami and Pu Muana, not just by research papers. The partnership between Central Agricultural University Imphal, ICAR-Indian Institute of Rice Research, Hyderabad and farmers in Mizoram did more than just show success. It created a plan for sustainable farming in the north-eastern region. Today, young farmers in Mizoram look to Thenzawl for hope. They see a woman who tried something new and a man who used science in farming. They see that with the right seeds, knowledge, and support, farming can change lives. Once you start making changes, they keep growing. The story of Pi Lalhuzami and Pu Muana shows what can happen when science and hard work come together. It proves that with the right methods, farming success is not just possible but certain. The big change in Thenzawl gives hope to farmers in India. It shows that farming can be both good for the environment and profitable with support from science, helpful services, and hardworking farmers.

Impact of the new variety

This success story is about more than just better crops or more money. It shows what happens when science works with farmers, when expert knowledge joins with old wisdom, and when communities accept change. The neighbouring farmers were also motivated by the results and started reaching out the research team for the technical help as well as seed distribution. For Pi Lalhuzami, it meant having her own money and gaining respect in her community. Her success encouraged

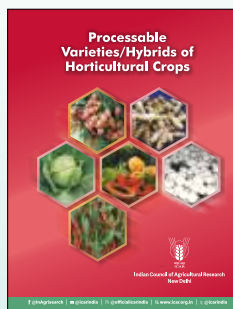
other women to think about farming as a real job choice, breaking old gender roles in agriculture. For Pu Muana, it confirmed that trying new ways was worth it and showed him what scientific farming could do. For the research team, their work made a difference outside the lab and beyond research papers. For the region, it was a model for changing farming that could be used in other places with similar conditions.

SUMMARY

The success of any technology

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