

Story From The Field



Ibu Saena at the cassava flour milling plant in Karangreja village

Photo: Nina FitzSimonsVAIP-Rural

On The Cutting Edge

An innovative program in the cassava sector improving the lives of women in East Java province

Saena has no idea when she was born. But with a twinkle in her eye she exclaims, “It must have been a long time ago”! Saena is from Karangreja village in Jember district, East Java. She was widowed when her youngest child was in grade two. The experience was devastating and, as a mother of five girls, she struggled to put food on the table. “Luckily my family was healthy because I had no money to take them to the doctor”, she says.

When her husband died, Saena found work as a seasonal agricultural labourer. “I get about two weeks work each rice season”, explains Saena. “It’s not much, but work for women is limited in Jember.

In fact, many husbands go overseas to find manual work leaving their families at home. With my own husband gone, I am the sole income earner”, says Saena. From her

labouring Saena earns Rp.20,000 per day (approximately \$2) and there are three rice seasons a year. That gives her approximately six weeks of work a year. Saena’s annual income, she calculates, is approximately Rp.840,000 (\$84). To get by, Saena relies on the help of family and neighbours.

However, Saena’s life has changed significantly as a result of a new program—ARISA. ARISA partners research organisations with the private sector to commercialize innovations in the agricultural sector. In 2015, ARISA established a partnership between the University of Jember and PT Bangkit Cassava Mandiri (PT BCM) to expand village-based processing plants using innovative technology to produce cassava chips. The chips are used as a raw material

to make modified cassava flour (MOCAF), which is sold commercially by PT BCM.

The processing plants are part of an integrated farming system designed by the partners to increase the income of smallholder cassava farmers. While cassava farming in Java is mainly the domain of male farmers, the project is also having an impact on women's income. All the cassava chip processing plants employ women in the preparation and processing of the cassava. "The processing plant in our village employs 30 women and two men", says Saena.

"Two men are employed to do the heavy lifting of the cassava sacks and the heavier parts of the processing. But otherwise women rule the roost here", she exclaims with a laugh.

The owner of the processing plant, Nur Hasan, says that he prefers to employ women. "They work faster than men at peeling the cassava tubers for sure", explains Nur Hasan, "And the women have good attention to detail. Most of the production plants in the area employ women to do the processing", says Nur Hasan. There are now 65 production plants across Indonesia, employing approximately 1,300 women.

The peeling of the tubers has also been made easier with the design of a new tool by the Food Technology section of the University of Jember. "Traditionally tubers are peeled using a small sharp knife", explains Nur Hasan, "The peeler designed by the University has a guard

which means the women can work faster without fear of being cut. The peeler is locally made and cheap to produce", says Nur Hasan. Saena agrees that the new knife has made their work a lot easier "Now we can talk and yell at the kids as we peel without having to pay close attention to our fingers", chuckles Saena.

The impact of employment at the production plant has had a significant positive impact on the women's lives. "I now have a more secure income", says Saena. "We receive Rp.70 per kilogram of cassava we peel. Most of us peel about 300 kilograms in half a day meaning we earn Rp.21,000 per day (approximately \$2.10). Because we only work half a day it means we still have time to cook and be there when the kids come home from school", says Saena. "We also have full time employment for up to eight months a year". In addition to peeling cassava the women also earn Rp.30,000 (approximately \$3) a day for drying the chips. As a result of her employment Saena's annual income is 500% over the previous year. While her income is still modest, it enables her to meet her family's daily needs and plan for economics shocks, such as illness. "It is such a relief to know that if my grandchildren are sick I can now afford to take them to the doctor", says Saena.

In addition to the increased income the work brings, Saena and her colleagues talk about a sense of purpose and pride the employment brings. "When I walk through the village now I hold my head high", says Saena. "I may still be a widow", says Saena, "But I'm a widow who can support her family".



Ibu Repah demonstrating the new peeler used by the women Karangreja village
Photo: Nina FitzSimons/AIP-Rural