





## Stories from the Field

"My own dream is that we can all improve our lives using the skills taught by the Soy Doctor"

- Irfan, the Soy Doctor

## Just what the Doctor Ordered

Soy Doctors in NTB improving soybean yields for smallholder farmers



Mahfud planting his soybean using the new cultivation method (Photo: PRISMA/Nina FitzSimons)

Mahfud, a 41-year old soybean farmer from Tambe Village in Bolo subdistrict on the island of Sumbawa, is seeking refuge from the sun in the shade of a large tree. Mahfud is with five other farmers from the Mpunga farmer group. They have just finished planting their first crop of soybean under instructions from the local Soy Doctor, Irfan.

The Soy Doctor is a new initiative designed and supported by PRISMA, an Australia and Indonesia government-supported rural development program. PT BASF, a private sector agrochemical company, has partnered with PRISMA to train fifteen Soy Doctors in Bima District as a trial. The project aims to improve soybean productivity for smallholder

farmers through better cultivation methods and effective use of pest control.

Irfan is no stranger to these farmers - he's the head of their 31-strong member farmer group. But this is the first time his friends have called him "Doc". Irfan was chosen by PT BASF to participate in an intensive training program to become a Soy Doctor because of his leadership skills. "We are trained how to use PT BASF products from seed treatment through to pest and disease control during the life cycle of the crop", explains Irfan. "We also receive training in good cultivation methods from ground preparation, to planting, harvesting and post production.

It is a comprehensive training package by PT BASF".

Once the Soy Doctors receive their training, PT BASF helps them establish farmer field schools to teach their skills to farmers from their local farmer groups. Mahfud attended Irfan's field school. "I became really interested in the Soy Doctor program when Irfan showed me his demonstration plot", explains Mahfud. "We each have 0.7 hectares of land. Irfan planted his land using the techniques taught to him by PT BASF. His crop was extremely healthy and he got more soybeans that season compared to me. That's when I became interested in what he had to show me", states Mahfud.



Irfan, the Soy Doctor, providing direction to local farmers in Tambe Village (Photo: PRISMA/Nina FitzSimons)

Irfan explains that most smallholder farmers in Bima use a scatter planting method with their soybean. "It's not an effective approach and uses far more seed", explains the Soy Doctor. "By using guide ropes and planting the seed in rows with a set distance of around 30cm, the soybean has better access to nutrients and we end up using far less seed" explains Irfan. With the new planting regime Irfan and his farmers are using 20kg less seed. "I save money with the new technique", says Mahfud. "Before I was using 70kg of seed on my block and now I only need 50kg. I also need to hire less people to plant my land. Before I would hire seven day-workers to plant my crop but with the new technique I now only need to hire five".

Irfan says that PT BASF products are not new, but by becoming a Soy Doctor he now helps local farmers use the products correctly. "Pest and disease are big issues in this area", states Irfan. "It is easy to lose a full crop before the seeds even germinate. One issue is that the pests can build up resistance to pesticides if they are not used in the correct way. My field school gives

the farmers information on the correct dosage and use of the products so this doesn't happen". While there is an initial outlay to buy the product, Irfan explains that the increase in soybean yield makes the cost worthwhile.

Irfan's demonstration plot has been a big talking point in Tambe village. "You really can see the difference between his crop and mine", says Mahfud. "Without seeing the results I may not have been convinced. It is not easy to change the way we do things, but seeing is truly believing", exclaims Mahfud. During the last planting season Irfan produced 1.9 tonne of soybean compared to Mahfud's 900kg. Both men agree it is a significant difference.

The new methods have also impressed the farmers because Irfan's soybean yield increased significantly despite the effects of the El Nino. "We're experiencing a drought at the moment", explains Irfan. "During the last planting season we had one month without rain but, despite this, I still managed to achieve greater productivity than my neighbours", says Irfan. "The seed treatment improved the

root system and my plants survived the drought". Irfan uses Mahfud's neighbour as an example, "Last season Lukman's crops were affected by the drought and disease. His only produced 700kg of soybean whereas the previous year he produced 1 tonne. But when people see I produced 1.9 tonnes during the same drought season, it has become a big incentive to learn new ways".

This current planting season Irfan is training 53 farmers from seven villages. "We do the formal field school but I also talk about the new cultivation methods in our monthly farmer meetings and even after Friday prayer", explains Irfan. "I talk about three main things: how to plant; how to take care of the plants; and how to treat the plants. It's simple, but effective".

The increase in income experienced by Irfan and his fellow farmers is significant. "We are not rich farmers", admits Mahfud "We do not have a motorbike or a fridge. We live a simple life. But it is my dream for our two children to go to university to get a better start in life. The increased income from my soybean crop is helping me achieve my dream of sending my children to Mataram University", says Mahfud, "It's because of this that I am interested in continuing these farming practices".

Irfan receives a modest incentive for BASF for becoming a Soy Doctor. "But I do it because I want to help the members of my farmer group and because I believe we can be better farmers", says Irfan. "My own dream is that we can all improve our lives using the skills taught by the Soy Doctor".

Following the successful trial in Bima, PRISMA is assisting PT BASF and other potential partners to upscale the program. The Soy Doctor initiative aims to train 120 Soy Doctors by 2018 with a farmer outreach of 4,500 in NTB.

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Surabaya 60238, Indonesia E-mail enquiry@aip-prisma.or.id The Australia-Indonesia Partnership for Promoting Rural Income through Support for Markets in Agriculture (PRISMA) is a multi-year program that is part of the Indonesian Government's long term strategy to encourage economic growth. With the support of the Australian Government, the program aims to achieve a 30% increase in the net incomes of 300,000 male and female eastern Indonesian farmers by the program's end by providing innovative solutions to increase productivity and market access.

PRISMA focuses on agriculture sectors that are the main source of income for a large number of smallholder farmers and have strong growth potential in areas of East Java, West Nusa Tenggara, East Nusa Tenggara, Papua and West Papua. Partnering with key market stakeholders, the program help spur growth along the value chain by reducing barriers and constraints within the agriculture sector.