

## Tri Mumpuni: Helping Village Women with Electricity

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"And we've got social entrepreneurs like Tri Mumpuni, who has helped rural communities in Indonesia—(applause) harness the electricity and revenues of hydro-power".

That is what the President of the United States Barack Obama said in the opening speech for Presidential Summit on Entrepreneurship in Washington DC last 2010. Who would not be proud to hear that a prestigious award goes to an Indonesian woman, Tri Mumpuni, a graduated engineer from Bogor Agriculture Institute due to her efforts popularizing hydro electrical power that has successfully led 60 other villages? At present the efforts are built by various parties to revive villages with no electricity, thousands of hydro powers become government and private projects for village development program intended to help improving their welfare. Developed and developing countries invited Tri Mumpuni to present

her work model in this program, particularly on how villagers were 'aware' of hydro technology with various social approaches that she already did. It is important to know that 49% of Indonesian people do not have the access to electricity for their everyday lives. We can imagine how electricity is very important for villages to improve their lives, especially for women who are mostly the backbone of their family. To get water, most of the women have to walk the distance of about 3 to 7 hours. It means everyday women in the villages spend an average time of 3-7 hours to get water and firewood for their household activities. These 3 to 7 hours can be used for economic activities improving their livelihood.

When visited by Jurnal Perempuan, Tri Mumpuni humbly stressed that what she did is actually a simple idea that everyone can do, but if there is no willingness, it will be hard to execute. Started to go around to many villages, she thought that there are so many villages have not had the access to the State Electricity Company (PLN). "There is surely another solution," said Mumpuni. Since then along with her husband (Ir. Iskandar Budisaroso Kuntoadji) a technology expert, she made plans and organized training in some villages. Along with her team she worked all out and her success making hydro technology became wellknown. According to Mumpuni this technology has been existed since the 15th century. Micro hydro was a modified water windmill and had been developed well in Europe and Japan. In 1852, Japan had used micro hydro and is still well-taken care and is very useful for the villagers. Mumpuni then asked to herself why this simple technology was not implemented particularly in villages with natural energy abundance. Microhydro technology is not a complicated technology compared to nuclear energy and can be taught to everyone. At present the villagers are able to operate it after they are given with the knowledge and are being trained patiently and diligently by Mumpuni's team.

Mumpuni is an agricultural engineer graduated from IPB (Bogor Agriculture Institute) majoring in Social-Economy from which she learnt about economy of people and it is then useful to the societal empowerment activities through micro hydro technology. Her husband was graduated from ITB (Bandung Technology Institute) and had been studied Microhydro in Switzerland. Learning from her husband, she

knew how this technology can be useful for the Indonesian society. While her husband develops technically on how this technology could be implemented, she did it in another way, namely introducing this technology so that it can be useful. "I feel that there is a method of difference when it is the women who operate it. Women tend to be more persevere, for example in a year we want to build 100 Microhydro, so to make it useful, I think about how to market the technology by approaching people dilligently, "force" people to fund or finance and

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train people so that they understand the technology. "In Mumpuni's opinion, Indonesian government should pay attention to this effort because it is the goverment's job to serve the public in solving energy problem. Mumpuni continued, "Women are taught more to cope with daily household-chore which highly depended to electricity. Women think more of what is importance for the environment," said Mumpuni firmly. "While my husband loves how to

improve technology, I love applying the technology."

Besides making useful of the technology, Mumpuni explained how Microhydro forced people to pay attention, study, and take care of their environment. Nature-based technology makes people are willing to take care of it to keep sustainable energy for the next generation, such as paying attention to trees in keeping the water source. "In Indonesia, the trees are small and plenty. There are so many rivers scattered on plateu that are potential for Microhydro technology to be built. This is relatively cheaper compared with the centralized-system led by the government, "she said. She told how easy the villagers learnt when they were taught about this technology. "They are probably quicker to understand compared to urban people," she added. According to Mumpuni, villagers are more receptive because they are driven by the necessity, they want to just go ahead applying the Micro hydro and have a better living. While urban people already get used to the situation where everything is available instantly. Villagers have to

walk a distance away if they are ill. If there is electricity, everything will develop, they can make roads, have good access, and earn money. With that money they can send their children to get better education. Mumpuni considered that in Indonesia there are a lot of smart people. If Indonesia is led by a great leader, they will be useful for the society. "Unfortunately we haven't had a strong leadership. What we have is people with position, not mandates that should be used for the welfare of the state. "In her opinion, public officials shouldn't only stay at their office; they need to go to the community to look for problems in the management to be resolved. Because public officials have access to finance, power, position, and regulations. "Unfortunately Indonesian do not have such a leader!" she explained disappointedly.

Nowadays, there are hundreds of Microhydro used by villagers, not to mention people who learnt from her team. "There are even thousands that are built by many parties including government," she said. Unfortunately they didn't follow the methods applied by her so that this technology is not being opened to community and is not wellmaintained. There is no moral responsibility, for example if 5 billion rupiahs is given for the budget to build Microhydro, perhaps only one billion rupiahs is used because the rest of the budget is taken for other things. Tri Mumpuni has been invited by the Ministry including Aburizal Bakrie who said that, "Well, if I implemented your concept, KPK (Corruption Eradication Commission) would call me." Mumpuni did not understand why something that is good for society become very scarce and scary? Meanwhile to run the program, Mumpuni had to make a visit and talk to people from noon till night. The government doesn't have this concept of "close to the people". Their way is that the project is being tendered, the third party is paid for the building, but whether it works or not is not being questioned and monitored, what matters is that the money is already been given, and the materials are available.

"Lots of projects are already damaged in 3 months and it was not monitored," she added. Her experience in working with the government was not successful. Until today, the establishment of Microhydro doesn't run well, and the budget does not conform with the contract, and the government has not paid at all. "My money has not been

repaid. I wanted to help the government but all I got were sickness, pain, depleted energy, and I have to call them over and over again because I have to keep on collecting." Tri Mumpuni educates young engineers to work as volunteers, not like the government who are very stingy in giving fund. "If we have to walk for 9 hours or even for 2 days, we will do it. Many hundreds Microhydro were not done seriously, because when they were built, they didn't work properly. Some were burnt, experienced broken pipes, and so on. "Meanwhile when she was invited to the Netherlands, she only made presentation for half an hour and only seconds afterwards that the Dutch Government made planning, the funds listed in the contract were in accordance with the budget.

Foto: Dok. YJP



## Growing Women's Economic Independence

One thing that makes Tri Mumpuni felt very excited in doing this activity is that when the electricity is installed, it is the village women who feel the advantage at the most. They don't have to look for firewood to cook because they can save their money to buy a ricecooker so they don't have to spend much time on cooking. Or they will look for appliances that can help them in doing household chores.