



**Report on Information Day Workshop  
Geodata for Agriculture and Water Facility (G4AW)  
Wednesday, May 7<sup>th</sup> 2014  
Grand Sahid Hotel, Jakarta, Indonesia**

**Introduction (Introduction Session)**

There are 42 participants coming from 27 different organizations consisting of private sectors, government, knowledge/research institutes, national and international non-government organizations. List of organization is on the Annex #1. The workshop was run based on the concept program but with a small adaptation to respond the dynamic situation of the workshop. The concept program is shown in Annex #2. The workshop started with a welcoming speech from Joost van Uum the person in charge of the NSO and followed with an opening speech by Peter de Vries, the First Secretary (Water Management) of the Netherlands Embassy in Indonesia.

*Peter de Vries  
First Secretary (Water Management)  
The Royal Netherlands Embassy in Indonesia*

Geodata (G4AW) is very useful for agricultural sector and can be used by Indonesia's Government, NGOs, and another related organization involved. Netherlands government values G4AW as an important program for Indonesia as a form of cooperation, not only as the element of relationship between two nations, but also to improve food security and water development such as irrigation, vegetable cropping, and any other kind of farms. Purpose of Netherlands involvement is to exchange information and to develop capacity and knowledge in agriculture sector with farmers and any people/organization related in Indonesia.



Besides agriculture sector, another important area is water management. Water is another important area in this program, for example "how you manage water", mainly in Java. Java has a lot of water resource but sometime water becomes a limiting factor. So that, for Netherlands, increasing water efficiency in agriculture is a major issue to be discussed.

For those reasons, the long term programs that will be included in this project are food security (in agriculture), water management, and sanitation. It's also about technology and

innovation. The purpose of Netherlands is trying to promote knowledge exchange among Indonesian and organization as a part of technology and innovation development.

We also hope that all of the organizations involved today can share their possible idea for the program so that the program will be developed as well.

### Project Details Session

*Joost van Uum*  
*Netherlands Space Office (NSO)*



Food security is important and water used for agriculture is also important. The satellite information in general (and specific to food security) can help countries to make a right decision in the right time for their agriculture sector. It helps farmers to get data because without data you don't have information, without information, you don't have knowledge. If you don't have knowledge, you can't make the right decision. In the efficiency of water used in agriculture, we need information of location in maps. Satellite information can provide those data very well.

How many people use satellite information? It is same as you use phone to get data. The data you get is based on satellite information. Satellite information in agriculture can provide data to help people in order to select crop, to select land, access to several credit, cultivating, and the marketing. Each of these steps is kind of information people needs. For example, for pre cultivation, satellite information can provide information of maps, soil maps, selection of crops, lands to be cultivated, crops calendar, and index based micro insurance for finance. The several advantages of satellite information are:

a. Landscape maps

Satellite information is also providing the landscape maps, for example the map of Kalimantan which is taken by radar. This map is used for forest conservation. Another example is the time lapse map of Jakarta in 1976-1989-2004, red reflects vegetation and green reflects the urban area (showing pictures from the power point presentation)



b. Crop calendar

Satellite information can provide weather/season data to make crop calendar. Satellite information is frequently updated almost every day.

c. Micro insurance

Many pilot of micro insurance in the world use satellite information. Almost everyone has mobile phone and use it to get information. Information is useful for cultivation itself, to make a landscape maps for land preparation, crop growth monitoring, soil maps, crop growth monitoring, irrigation advice, and warning. By the

optical satellite image, it's difficult to analyze because it cannot go through clouds, especially in Indonesia where there is always many and thick clouds. By this image you can't get a clear image and then you can't make a lands cover maps. But with satellite images, it will provide clear image by using the radar analysis.

d. Crop growth monitoring

Satellite image can be used to see the changing of forest, for example, in Kalimantan deforestation. By the satellite image you can analyze the growing state of the trees and its vegetation.

e. Irrigation advices

With radar you can also measure moisture of the soil. For example, it informs you that the crop has no water stress when the soil moisture is above the critical level and below the field capacity.

f. Advices and Warnings

Satellite information can provide map showing us the critical area for flood. Flood mapping with satellite mapping makes you able to see the flood time lapse. Satellite information is also very useful for evacuation. In Bangladesh, the risk of flooding is so high. The farmers have to find where the place to store the yield. You can identify the place with radar imaging, not only the place, but also how to get there. So the satellite can be used to manage the whole transportation and evacuation.

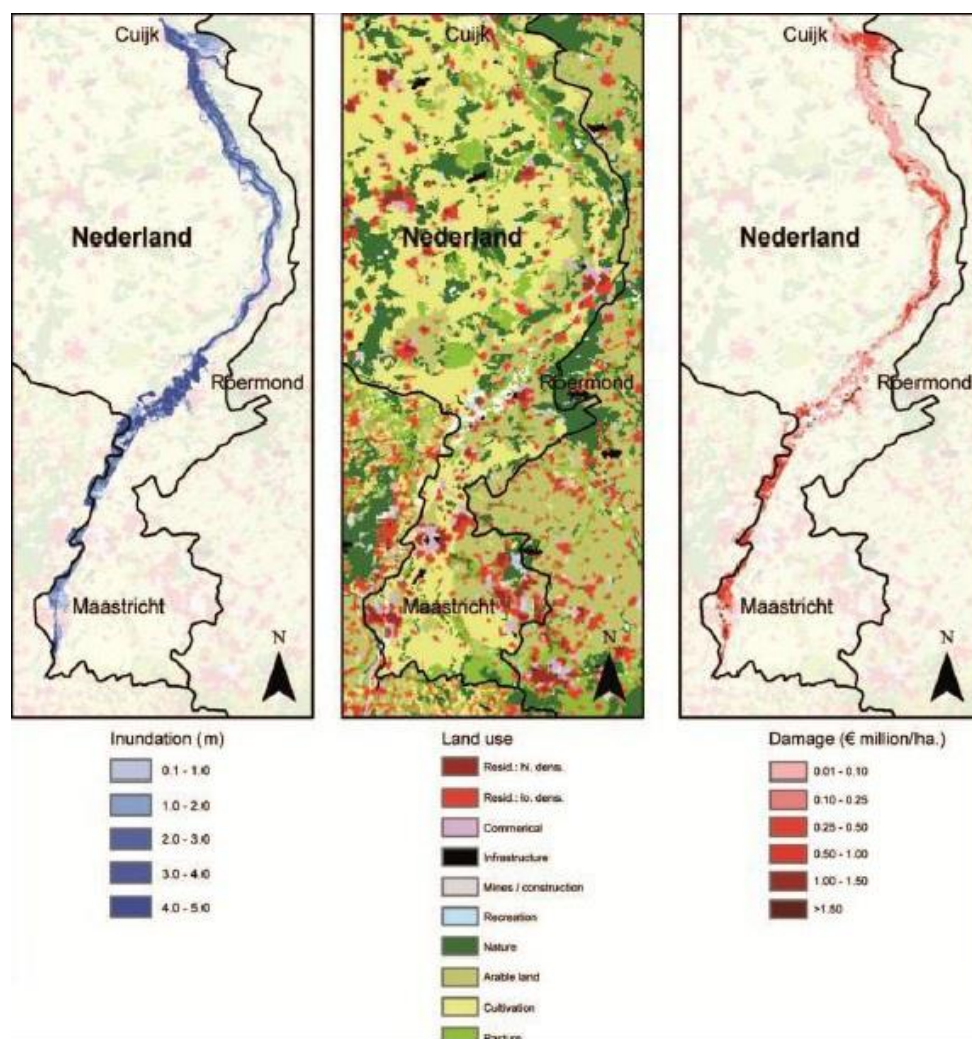


Figure 1: Satellite Based Imaging Flood Assessment

With all of that information, we can see that satellite information can provide lot of data about crops, weather information, soil, monitoring of vegetation, irrigation, and also the advice for transportation to manage the store of yields. It is a nice example to see how satellite information can integrate all needs of farmers.

For all of this, it is so important to have a good partnership. There must be exchange knowledge between government and other organization. In one side, you can collect data from the satellite, but then in the other side you have to analyze the information services for the farmers through internet or mobile phone. The Minister of Agriculture in Indonesia is interested to the program, but the infrastructure of program has to make an operation services reach the farmers and keep it simple, don't make too much sophisticated services that farmers find it hard to understand. The program can be used as application in android or SMS in usual mobile phone.

Why it's important to use data based on satellite? Because it is objective, consistent, cross border, and has a specific frequency of time. In Indonesia, there is no much place to collect this kind of data. Furthermore, Indonesia is a large area so we need some technology that can cover up the imaging of the area. So, with this satellite imaging, it is very easy to get the information. There is the plan to provide crops insurance for 1 millions hectare and with an average farmer has 0.50 hectare it means there will be 2 millions of farmers in Indonesia to be covered and monitor. And if there is a damaging field, or larger damage, the government can't see the damage to cross-check when there is claim. With the satellite imaging, they can see it.

EU will launch many satellites with their Sentinel program. There are already many satellites in space, for example Landsat (European program), it is low cost and daily frequency imaging. The resolution of image is 50 cm resolution, the limit range under the Law. So every day, you can see images updated from 1 spot. Sentinel 1 (Europe 2014) is based on radar data, so it is very useful for this program. There will be Sentinel 2 which is going to be launched in 2015, it is also no cost, multispectral, and used for agricultural purposes and crop monitoring. Every year they reach higher resolution, for now, optical images reach to 50 cm resolution. If we compare it with Airborne picture (used in Netherlands), of course Airborne has a better resolution, up to 5 cm resolution, but with the plane which air every year, this will be cost too much. Furthermore, Netherland is a small country, how about Indonesia?

Another advantage of satellite information that will be used on this program are; there's a lot of data coming up for free, the data can be analyzed and process for infrastructure, and then farmers can access it.

## Result of the Quick Scan G4AW in Indonesia

*Heny Soelistyowati*

*Agri Pro Focus Indonesia Agri-Hub Coordinator*



The common issues related to agriculture in Indonesia include land less and small holder farmers, located in different areas. It is mostly occurring Java. This makes it difficult to organize farmers in their farming system. Another common issue is bad transportation and bad farming facility. Actually, Ministry of Agriculture has good program in their websites in which they provide useful information related to agriculture. But there is no clear evidence that this

information is used by farmers at grass-root level. There is also extension workers, but in some areas, they cannot reach all villages that they are supposed to be responsible for due to the location of farmers at isolated areas and no means of transportation.

Another issue is access to market information and finance. Although the ministry has already information about market and update it regularly, but there's no clear evidence this information can be reached by farmers in any level. It is also happen to access to finance. Government provides loan program but mostly the one who can access it are small traders and small scale enterprises. Farming is considered to have high risk that bank is not able to provide the loan for them. It is good news that Ministry of Agriculture has now started insurance for farmers. For instance after the volcano eruption in Yogyakarta, the government provide crop insurance and cattle (cow) insurance for the farmers being the victim of the disaster.

### Specific Issue

In Indonesia, rice is a big issue in Indonesia as it is not only about food security but also about economy and politics. Indonesia has the target to be self-reliance in rice. And therefore, government provides lots of subsidy for rice farming by free and low cost seeds and fertilizers. But the subsidy for seeds and fertilizer are not given to farmers, but to industry. Organic rice is now a trend in Indonesia. This may because of farmers do not want to depend on subsidised fertilizers which some times hard to find.

Indonesia is a tropical country, famous in tropical products, such as coffee, tea, and lot of tropical fruits. But due to small size and scattered land, it is difficult to collect the product for big market. Low quality and low productivity are still issues undergone by farmers.

Other specific issues that are developing among farmers in Indonesia are:

#### a. Aging Farmers

According to BPS, number of farmers is reducing; the average of age of farmers whom we can find is around 45-50 years old. But there's good news as more NGOs are now promoting young farmers focusing in agriculture and agri-preneurship. Young people needs to be introduced with agri-preneurship where they can learn

how to do agriculture using agri business (land farming as well as marine and aqua farming) and smart climate approach supported by modern technology and mobile application.

b. Subsistence to sustainable farming

Having small size of land makes it difficult for farmers to be a sustainable farmer. Further scattered land in different geographical area make it also difficult to manage the farm in order to improve the productivity and quality including in getting farming certification (such as organic, fair trade, RF, UTZ certifications). There is the need of policy in land use and land tenure to protect farm land being converted for other use.

c. Water for Agriculture

Water is needed for agriculture, and even the animals. There is a research that says about 70% of water is used for agriculture. In Indonesia, there hasn't yet a research to study how to use water effectively in agriculture. In the other side, there is an increasing awareness that water resource is reducing in some place and that more and more water source/springs are dried up.

d. Aquaculture

Indonesia is an archipelago and surrounded by seas and yet fisheries has not been a popular topic for discussion. Partnership between fisherfolks and private sectors to create better and fair business environment should be explored and supported. Aquaculture practices using more environment friendly approach can be developed to help private sectors who have been working with fisherfolks to increase aquaculture productivity

### Possible Solutions

Some of possible solutions that can be implemented to solve the problem faced by farmers including the utilization of G4AW technology, they are:

a. Rice Farming

By using the technology of G4AW (using the satellite), farmers can do the soil mapping, see the reliability of rice farming, and improve the infrastructure. Some of the organizations already using mobile technology of GPS, GIS, spacial mapping, so I think by this technology improvement, you can improve the strategy to develop agriculture in Indonesia.

b. Subsistence to Sustainable Farmers.

Lot of farmers in Indonesia is still subsistence farmers, RS derived crops statistics together with the census statistics could be input to landevaluation processes. Which areas are traditional low and high yielding areas for the various cash crops. In case of low yielding areas probably replacement with other (less vulnerable crops could be realised. This requires also collaboration with agricultural research institutes advising and testing on crops resillience to drought, diseases, poor soil conditions, etc.

c. Aging Farmers and Attracting (Interest) of Young People.

To attract young generation to do farming in agriculture, such as agribusiness, we need to think the strategy to attract the young people to concern in related area. The education and awareness of RS applications and the combination with modern technology like communication (app development, telecom and mobile solution, location based services) and ICT in general (like googlemaps, facebook, open data, etc) should be stimulated. In G4AW an educational component by involving entities

active in education and research and development can be introduced. It requires a long term vision and should be especially stimulated by the government and the involved ministeries. BMKG has started a good model of training course with their Sekolah Lapang Iklim.

d. Aquaculture.

There is lot of potentials from aquaculture. The use of RS especially on water quality (optical RS) could help in monitoring waters with algae or waterplants (e.g waterhyacinth or other plants). The monitoring could help in assessing problems on fishing cultures (preventing monocultures like the Nile Baars in Lake Victoria in Africa) or fish production problems due to shortage of oxygen or acidity due to organic waste for example.

The complete information about the utilization of G4AW in agriculture in Indonesia can be found at <http://apf-indonesia.ning.com/profiles/blogs/g4aw-workshop-presentation-in-indonesia>

### Discussion on Issues Connected to the Program from Attendants

*Syarif B.*

*LAPAN*

Q: Talking about marine science, how about the fisherman?

We have developed a map of potential catch fishing zone based on satellite information (radar). We send the information to the ministry of fishery and marine. In Indonesia fishery and marine affair is not under the Ministry of Agriculture. We expect them to use the information for the benefit of fisherman. So if you want to know the information, you only have to contact the department of fishery at district level.



A: Fishery is also part of food security as well because fish is also food. The same as tea, coffee which are commodity, we consider them as food. So, it is also possibility to have cooperation in this area, in the marine sector.

*Betty Mardanus*

*PT Grosys Intipiranti*



Q: There is problem in agriculture in Indonesia, most of farmers valued as labors, and then the decentralization has a bad impact to the farmers. Therefore there's a lot of question in the system you want to implement. Big problem in Indonesia is not only the production, but also the harvesting time. The problem is, according to industry, like Bangladesh faces too, the storage, farmers feel difficult to point out the solution where the yields can be stored. The quality of the storage itself is also an issue. Government has to start to build the infrastructure. If this program will be implemented in Indonesia, I think the government and other organization must be sharing their information. What kind of organization should be involved, what data of satellite should be shared.

A: The government has a positive support for this program. Netherlands Government is the one who will fund the project, but the people from organization here are the people who will create the program, for example how you manage the irrigation scheme or anything related.

KRUHA

Q: This is a very promising project, but how to promote to large number of farmers in Indonesia? Is there any list assessment that proves this project will boost the production of farmers? Is there any kind of issue discussion among the farmers in Indonesia about the water crisis, or any agriculture crisis? If this project is used by the wrong institution, big group can dominate the minority, and the policy that will be made, will push the farmers. What is the best scenario to work this out and is there any risk?

A: I would ask the same question to you. But we have valued the risk. The Indonesia government has already support it. You need to come up with creative and innovative ideas on how to reach the farmers. The one who have the responsibility to reach the farmers is you.

*Ika Dwinita Sofa*

*Micro Insurance, JASINDO*

Q: In term of agriculture, the things have not change. From what I learned in school agriculture has the same problem. There have been decision made and mostly the decision didn't come to the implementation. When we are talking about micro insurance, we don't have valid information that can support us to carry out a proper process. And the pilot project on crop insurance is not a successful one. It already affected us, and we have suffered the lost. Is there any information that we need to provide for farmers related to crops insurance?

A: The project proposal of G4INDO is still under evaluation and it is not yet implemented. But for this G4AW, it will be starting next year. Two days ago, we have a meeting with JASINDO to discuss G4INDO on crops insurance. And we feel the same. There are things to be prepared before implementing the program. But you have to do it together, with other organization, with LAPAN, BMKG, research institutes and even with NGO. To keep the insurance going well, you have to reach the farmers. You have to calculate the estimation of risk in the area of farmers. The data that will be distributed is a safe basis data for anybody. It is the same data for everyone.

*Mr. Heinrich Terhorst*

*GIZ*



It's interesting to use geodata to see the changing of forest. There will be a chance to a future development in forest production. For us, cocoa is very typical non-timber forest product. High production of cocoa in Indonesia is from Malinau (North Borneo) and Berau (East Borneo). In 2020, Indonesia visions to be world's leader of cocoa production from these two areas, to achieve two tons per hectare, combined with the degrading of cocoa garden to a wrong



system applied, chemical, and fertilizer, it endangers food security. How we try to adopt the system to improve food security and improve the production of cocoa? We should actually use the data to our district. Put all the data in one map, and then it will be comparable. We need this supporting and collateral activity in agriculture.

### **Indonesia-Netherland Joint Cooperation Program Session**

*Jan Jaap*

*Deltares*

*Water, Weather, and Climate Information Services for Indonesia*



Deltares with such organizations in Dutch and Indonesia in 2011 started to run the program with intention to improve water, weather, and climate information in Indonesia. Basically we started to strengthen water resource in Indonesia by combining the knowledge of related issue from Holland and Indonesia. It's hard to find hydrologist in Indonesia. That's why the entire national institute joins together, so that we have so many data.

SIH 3: important for hydrological data, meteohydrological data, and geohydrological data available for Indonesia in one umbrella, in one coordinator system by BMKG. Basically joint cooperation program is an operation to serve the data (what is historical data, hydrological state, what happens during El Nino or La Nina, etc), then the data will come together to the database, and also the data of climate change.

Advanced Satellite Service is updated for every 3 hours, started from 2002, and very important for agriculture and hydrology (such as flood assessment). We hope that Sentinel satellite can be used to monitor flood.

Baseline data service is for users and programs/projects (Individual users: disaster centers, farmers. Programs: SIH 3 or any projects). It is the next step in 2014-2015. Together with G4AW connect with satellite information to national information system of hydrology. By this cooperation, we are concerning to service for agriculture and farmers such as dynamic cropping calendar, hydrological state, crop state and forecasting, and crop insurance assessment. The target in 2015 is 1 million of rice field should have access the crop insurance.

How to avoid bankrupt? And how to assess damage? Since we're talking about farmers, it is impossible to access individual damaging. The insurance company has already developed a "parameterice insurance system". For example in Jakarta, if the water level in BKB exceeds certain water level, automatically without assess of the damage, the insurance in Jakarta will fail because lot of people use too much money from insurance.

Discussion

Q: Is the data accessible?

A: One map approach coordinated by one institution, for example in SIH 3 coordinated by BMKG, then the use of data will follow the regulation. We can get the data in step by step approach.

### **Afternoon Session (Point of View from Organizations Presence)**

*This session purposes to gather your view of the presentation. We can do lot possibilities with data from satellite analysis. The biggest challenge is to make this technique is useful in Indonesia. Now you can share the ideas, the better insight from all of representatives of organization involved today.*

*Haidir Ilyas*

*Indonesia Bangun Desa (NGO)*

From 2010 to 2013, there is declining number of farmers at about 14 millions. Indonesia Bangun Desa (Indonesia Developing Village) wants to solve this problem (aging farmers). There are 30 people from younger farmers selected and trained in good farming approach. Then we deploy them to different villages to apply what they have learned with the existing farmers. This year is the second year of our program and there will be an innaguration session this month. So I invite all of you to come in inauguration of our project on 30 of May 2013.

Q: How G4AW attracts youth to be involved in the projects?

A: The question should be answered by you, it is our challenge (all of people in this room), and what do you think that they (farmers) need? What is their request (in this case, of younger farmers), what kind of information they are asking for, and what kind of issue that we can assist with. And another important is, how we can come up to bridge the gap of information distributing from government to farmers.

*Nelia*

*Ethical Tea Partnership*



What we have encountered the same problem in our project. That are in remote places and it is difficult to get in one area to another. So there is a big distance from one farm to another. Coffee farmers, cocoa farmers, etc are similar. What farmers need is just for the food to be ready on the table. Other things are not their priority.

However, to improve their livelihood we need to make them organized. All this scattered farmers need to be mapped together. I think we need the specific farmers (for example tea or coffee or cocoa) to be located in the right area. The idea of one national map (one map approach) should be implemented in Indonesia to combine the entire list of crops. Since I'm not expert in farmers, I invite all of the organizations to share their thoughts about it.

*Bastian A.S.*

*P.U.P.U.K (NGO)*

Q: We need to know the tender process of the project. Please explain us the eligible organizations or other partners who can invest to this project. We have difficulties to

coordinate with government. I think it's a lot of difficulties as NGO in Indonesia. What kind of partners you need for this project; national, private, government, or office? The project starts from 2014, next year or this year? How about this project implemented for seaweed in South Sulawesi, NTT, or else?

A: The presentation about how to tender to the program will be available in next presentation. First call of proposal is closed in March 2014, the second call of proposal will open in summer 2014, and it will continue to March 2015 as deadline to submit full project proposal. It is one year period to make a very good project proposal. It's not a few pages that we expected, it is something so thick proposal. You have also deal with tax government, and the dutch NGO should be involved cause they know how to deal with it.

*Betty Mardanus*

*PT Grosys Intipiranti*

Q: This grant is come from government. In Indonesia, such grant is to be going through Bappenas. How can this project involve private sector, NGO, and government itself? As you mention, you have come to LAPAN, BMKG, etc, how do we link this to private sector? Do we have always to link with those institutions too? How about the sustainability, is it possible to use and manage the grant in a business way?

A: Actually, this is a question I want to ask to you as well. How to sustain in within 3 years? So that in the proposal, you can include how you build the business case, including marketing analysis. Government has to be public organizations from the country itself to cooperate with private company. The government act as well closely link to operate, they cooperate, can make a policy rules that will make the project works. They are the one who can get the satellite data and then distribute it as well. It will help you to manage your program. It can't be only private which search for profit, neither only public, it should be working together. Is it profitable? Yes. We need to see that this project within 3 years can give you profit so it can be financially sustainable.

## **G4AW Facility: Goals and How to Tender**

### **Aim and Expected Results**

The project aims to improve agriculture and water sector and improve food security, reach at least 3 millions food producers (not only in Indonesia), by providing them good information services. The output that the program expects is providing useful and timely agro meteorological and/or financial/insurance products. The outcome that is expected are:

- a. Improved sustainable food production, more effective use of inputs (water, nutrients), and economic development
- b. Stimulating private investments
- c. Leading to financially sustainable services after 3 years.

The impact is improved food security and income.

### **Programmatic**

Total grant that will be available is €40 million from the Dutch government (Ministry of Foreign Affairs) with the total project is 3 years. The key of element of the project is gathering the need from food producers, how we reach the farmers and can get/distribute advice from SMS or else. The good partnership is valued based on business plan, business

show, and visible, sustainable information service based on satellite data. There are 14 countries targeted to be involved in this project. For Indonesia itself, it has to be 30% own contribution for Indonesia, and changeable. For another country for example Vietnam, it is 60%.

### **Project Requirement**

The project is not only about business case in 3 years, but also reaching minimum number of food producers: 200.000 (at least 200.000 farmers). The challenge is how to transfer the information provided to the every single farmer and fisherman as well. Maybe if the project runs for 10 -20 years with a micro insurance, it is easy to do. But with 3 years, it's quite challenging.

There are no criteria of crop eligible to this project. It's not only limited to reach the rice farmers, but also farmers from any harvest: cocoa, palm oil, seaweed, fish, shrimp, etc. If you want to make service financially sustainable, you have to achieve the must (reach 200.000 farmers). Another result you have to achieve is you can provide 10% more production or income, and use 10% less input such as water, fertilizer, etc.

The project is also about the use of satellite data, as the start of the information chain. It is also to build a private public partnership: associated partnership, business model, and sustainable services after project closure. You can use the satellite data, it is good actually, but you can say not to use it too. But you have to prove where the data comes.

Applicant must be a Dutch organization, should be responsible to Netherlands Space Office (NSO), and also responsible for the institutions involved in partnership. But it also needs to involve private company in Indonesia.

### **Process: Phasing**

The meeting for today is kind of information meeting. There is the time to request for advice until November 30, 2014. For instance, you can start with a 3 page concept to explain what kind of data you need, what is your idea for your project proposal, etc. But please do not expect too much because I will not always have time to review all request. The application, deadline is March 27 2015. After that date, we don't take it anymore. We are very strict about that. You need these months in advance to prepare your proposals.

### **Required for G4AW Application**

- a. User demand/information needs  
It's all built on trust. We try to seek a trust among the organization involved. If farmers don't think that your information is not accurate and come in a wrong time, they won't take it and you lose the trust.
- b. Possible service provision  
Build the project based on needs. But the information service is not enough. The capacity building takes the important part too. You have to train the farmer to use the service.
- c. Partnership  
You need to build a good partnership with government, NGO, and private. It aims to connect local initiatives as well.
- d. Business model
- e. Cooperation agreement

User demand driven:

- a. Definition of user group (based on trust)
- b. Definition of other stakeholders
- c. Definition of users needs (user survey)
- d. Capacity building and training
- e. Cooperation with institutions connecting users
- f. Connecting local initiatives

Providing information for the farmers is not enough for us. Capacity building is the important part too for your project. Good partnership is reflected from cooperation with institutions connecting users (such as government, NGO). If they are already initiatives, you can connect to all of them to share the information furthermore.

### **Solid Business/Sustainability Model**

It's about information and how to make sustainable service in 3 years. You need to make a very well business strategy (solid business strategy) by build a partnership with government who knows solid market analysis; it is appropriate choice in partnership, ownership of information service after project. The applicant has to build a financially sustainable service. If you have a good information service, farmers will pay for it. That measuring can be the indicator of the sustainable service.

### **Solid Partnership**

You have to close the information chain. It start with the farmers (the data), but this information must be delivered to farmers by someone. ICT/telecommunication Company should be involved as well. Partner is bridging the last mile to users of services. It is also about transparency in partnership, not only trust to and from farmers, but also trust to and from partners.

### **Information Service**

Satellite data are at the start of the information chain, it means the project should be based on proven technology and services. Transmission channels reaching user aims to close the gaps between partners and farmers. Integrate your idea with the distribution channel you build.

More information about itself can be found on G4AW website [www.spaceoffice.nl/g4aw](http://www.spaceoffice.nl/g4aw) which consists:

- a. Tender documentation (process)
- b. Forms and templates
- c. Regional and local activities
- d. Match making directory (finding a partner)

### **Discussion about Standard Procedure**

Q: Is there also an open cooperation? Or just closed cooperation?

A: My organization is the one who evaluate your project. The cooperation you build completely can be explained in your full proposal. You can explain your first description in 3 pages ideas, but you can complete it in the proposal.

Q: Can we extend the partnership after the proposal?

A: You can't have a higher amount of request for financial support for partnership you just barely added in your proposal. It should be explained in proposal, as many as your ideas are.

Q: The contribution for country is 30%, can we do it in "in kind" partnership?

A: The contribution can be in kind. But "in kind" form like knowledge or infrastructure you have built will not be accepted. In kind can be your time spent to work on this project.

Q: Is there any limitation amount of proposal from only one country?

A: If all country comes up with proposal that will be great. Let say there's 5 proposals from Indonesia, and they are very good, and then there are 25 proposals from other country. Then we select the best. There is no limitation of the proposal that can be accepted from 1 country.

Q: LAPAN has 2 regulations bonding. (1) LAPAN should provide the high special data to government office, one license for Indonesian government because it is private. (2) Law about space act: give a mandate to LAPAN to facilitate the data from space. The optical data is free, but for the data of quantity, such as water, is not available, because water is dynamic. If you want to ask data from us, just ask it, because based on regulation, LAPAN become a bank data for space data. You can also see the data on our website [www.lapan.go.id](http://www.lapan.go.id) for particular data, but not the commercial data. Or you can email us to [bankdata@lapan.go.id](mailto:bankdata@lapan.go.id).

### Good Partnership Session (Conclusion)

The partnership you build must be included private and public organization on the list below because they have certain capability for the project. The organizations are:

- a. Intermediates, Ministry of Agriculture, NGO, value to chain organization, others.
- b. Data/information service provider
- c. Knowledge institute
- d. Meteorological institute/office
- e. Organization active in ICT
- f. Mobile telecom provider, banking, insurance, nutrients, commodity value chain
- g. Government to ensure access to local data and license-to-operate



Q: The insurance company has been using some kind of satellite data or information to assess the claims monitoring (which area hit by reclaim, how far they deal with it). I like to know, is there any MOU, the NSO or the insurance company? Maybe you can supply more like raw data and analyze data. And the second, as we know in 2015 there will be crop insurance program by government, at least 80% of the premium will be funded by government. But we also know state can only cover for the premium 10%. Could the proposal insert a way to switch the grant to be premium?

A: For second question: we cannot switch it. And then, for the first question, the one who create the program is you and I will evaluate it. I think it is important for you to get the information about the insurance that is can be cooperated so well.

## Closing

The workshop was closed at about 16.30 hours. There were some participants who need to catch up their flight back to their home town. This is because some participant came from other provinces (Central Java, Yogyakarta and Bali). But some of participant stayed to ask some questions to NSO directly related to the G4AW facilities.

During the workshop some participants have already started with suggesting ideas, among



themselves as well as during the discussion and question and answer sessions. For instance, ICCO and Akvo Foundation have been discussing to use mobile phone in their food security program in Indonesia. The Jateng Berdikari Foundation from Central Java has come with their potential partners to respond the calls consisting of BPPT (government research institute focusing on technology at provincial level),

Government Food Security Body at provincial level (BKP), Sebelas Maret University (state-owned university) and Telkomsel (state-owned telecommunication company at provincial level).

The suggested idea on one map for all by GIZ was welcome by most participants. The Ethical Tea Partnership for instance, inserting that the one map for all would also be useful for tea plantation so they could monitor tea more effective and efficiently. LAPAN, the government research institution that is now developing their own satellite, has indicated that they would be able to provide radar map. However, anyone who needs the map should ask to the local authority.

## Suggestion for Follow-ups

In Indonesia, the workshop was not set as a match-making workshop. Instead it was set as an information workshop. Therefore, there was no specific session on match making. However, it is expected that during and after the workshop, each participant would be able to get connection with potential organizations for future partnership. As for the follow-up, Agri Pro Focus could provide information related to G4AW and potentials partners to work in the program including setting up meeting for potential partnerships between Indonesia and the Netherlands.

## **Annex #1 List of Organization**

List of Organization attending the workshop

1. WWF Indonesia (INGO)
2. PT PPI (Private Sector)
3. Ethical Tea Partnership (Private Sector)
4. Telkomsel (Stated owned telecommunication company)
5. GIZ (INGO)
6. JKPP (Local NGO)
7. SNV (INGO)
8. PT Grosys Intipiranti (Private Sector - GIS Consultant)
9. Deltares (Research Institute)
10. Central Java BPTP (Government Research Institute)
11. ICCO (INGO)
12. BPPT (National-Government Research Institute)
13. P.U.P.U.K (Local NGO)
14. Agriculture Prefocus (Network Organization)
15. MoA Working Comm (Insurance Working Group - Ministry of Agriculture)
16. Netherlands Embassy
17. HIVOS (INGO)
18. Jateng Berdikari (Government of Central Java think tank NGO)
19. LAPAN (Government Research Institute)
20. BMKG (Government Institute)
21. KRUHA (local NGO)
22. Asuransi Jasindo (State Owned Insurance Company)
23. ITC (University)
24. Lesman Boyolali (local NGO)
25. Indonesia Bangun Desa (local NGO)
26. AKVO (INGO)
27. Abt Associates (Private Company - Consulting)



## **Annex #2 : Program**

### The Concept Program for Meeting

- 09.00-09.30 Arrival
- 09.30-10.00 Welcome and General Introduction
- 10.00-10.30 Satellite Based Information Services for Food Security
- 10.30-11.00 Coffee Breaks
- 11.00-11.30 Stakeholders, User Needs, and Opportunities in Indonesia
- 11.30-12.00 G4AW Facility: Goals & How to Tender?
- 12.00-13.00 Lunches
- 13.00-13.15 G4AW Possible Business Cases (Selected from Quick Scan)
- 13.15-14.00 Discussion & Network Session 1
- 14.00-14.45 Indonesian Partners ± 5 Pitches from Interested Organizations
- 14.45-15.00 Dutch Partners in Agriculture and Water Sector
- 15.00-15.30 Coffee Break
- 15.30-16.45 Discussion & Network Session 2
- 16.45-17.00 Conclusions: Information Chain & Good Partnership
- 17.00-18.30 Drinks