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## **Farming Workshop in Long Seridan 23<sup>rd</sup> February 2017**

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## Farming Workshop in Long Seridan

Dates: 23<sup>rd</sup> February 2017

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### Farming Workshop in Long Seridan

Universiti Putra Malaysia (UPM) organized a farming workshop for local communities at Long Seridan on 23 February 2017. The training was led by Mr Make Jiwan, horticulturist lecturer from UPM and assisted by Dr Petrus Bulan, a lecturer in UPM who specializes in plant seed. About 15 Kelabit participants from Long Seridan and 20 Penan participants from Kubaan-Puak project area attended the workshop. The Penan participants who attended were from Long Si'ang, Ba Marong, Long Kawa, Long Lesuan, Long Ludin and Long Meraan.

The objectives of the farming workshop were:

1. To share the farming practices applied by farmers, including setting up a farm, seed selection, making organic compost and pesticides.
2. To distribute vegetable seeds and materials in preparing organic compost to the participants.

### Attendees

Table 1: Name and organization of attendees

No.	Name	Organization	Role
1.	Make Jiwan	UPM	Presenter and facilitator
2.	Dr Petrus Bulan	UPM	Presenter and facilitator
3.	Louisiana Lulu Lukas	UPM	Facilitator
4.	Alfred Keleman	WWF	Facilitator

Table 2: Penan Communities

No.	Name	Village
1.	Cherry Gadung	Lg Kawa
2.	Asai Berat	Lg Siang
3.	Berim Berat	Ba Marong
4.	Sagung Raja	Ba Marong
5.	Wong Berat	Lg Siang
6.	Simon Ngo	Lg Lesuan
7.	Ziki Wee	Lg Lesuan
8.	Sarah Luhah	Lg Kawa
9.	Robert Amat	Lg Ludin
10.	Bungan Siden	Lg Ludin
11.	Daniel Loheng	Lg Ludin
12.	Melisa Roland	Lg Ludin
13.	Sayun Kut	Lg Meraan
14.	Rita Kut	Lg Meraan
15.	Liza Niyek	Lg Meraan
16.	Roslind Ali	Lg Meraan
17.	Lali Uyok	Lg Meraan
18.	Janice Kut	Lg Meraan
19.	Robin Su	Lg Meraan

At the beginning of the workshop, Dr Petrus started the ice-breaking session, with participants introducing themselves (Figure 1 & 2). Then, the sharing session continued with slides presentation and demonstration on seed selection by Mr Make and Dr Petrus.

Among the topics shared in the workshop were:

1. Seed selection before planting.
2. Area preparation.
3. Type of vegetables and its nutrients.
4. Location of the farm.
5. How to store the seeds?
6. Planting system.
7. What type of chemical fertilizer that can be use?
8. How to prepare organic fertilizer/ compost – Bokashi Technique.
9. What is organic pesticides? / How to use it?
10. What type of plant that can be the organic pesticides?
11. Preparation of EM (Effective Micro-Organism) for Composting.
12. Awareness on the excess use of chemical pesticides.

During the sharing session, it was shared that planting mixed crops in one area could reduce weed and pest problems. Besides that, on the requirement for seed to germinate, factors concerned are light, temperature, water and oxygen. In addition, for small seed, one has to plant it in a pot or in the nursery before it can be transferred to the planting bed. Whereas for larger seed, one does not need to plant it in the nursery and can be planted directly on the planting bed. When applying fertilizer, one has to make sure that the fertilizer is not too near with the vegetables stem or in contact with the vegetable leaves. One could apply chemical fertilizer with NPK ratio of 15:15:15 or 17:17:17 for the fruit trees after the fruiting season. If the fruit is sour, one can apply fertilizer added with Magnesium + Te to make it taste sweet.

Also, in preparing organic compost, one can use paddy husk, rice water and dry vegetables. For faster decomposing rate, EM (effective microorganism) which is made from fermentation of brown sugar, salt and rice water mixture could be added. Known as Bokashi technique, liquid formed from this process will be used as fertilizer. Besides that, in the preparation of organic pesticides for crops, preventing them from being attack by insects, some plants that can be used are garlic, ginger, lemon grass, chilli, leaves of papaya, tobacco and soursop or any leaves that taste bitter or spicy. These are sliced and added with rice water where it can be apply directly on plant leaves or stem twice a month.

At the end of the workshop, each Penan participant was given two types of vegetables seeds (green leafy vegetables, locally known as *sawi* and *kangkung*) and two paint pails used to make organic compost, for bringing back to their own village. Mr Make encouraged participants to plant one type of plant in their village, which could potentially become an income generating farming products in the future.

- Most of them understand the sharing session provided by UPM.
- Participants that are not sure of the presentation have raised their questions in the sharing session. Here were the questions raised by them;

Q: What type of water that can be used to mix with organic fertilizer and organic pesticide?

A: Rain water, river water and pipe water can be used.

Q: How to set up planting bed for the vegetables?

A: Mixed the soil with organic compost or chemical fertilizer and left it for a week before plant the seeds.

Q: What is the recommended duration to apply fertilizer after the first session?

A: It's depend on the crop but normally next session can be applied after two or three weeks.

Q: What is the effect to the crop seeds if we plant it today and yesterday we applied the herbicide to kill the grass in that area?

A: The herbicide still left in the soil for about a week and if we plant the seed, it can reduce the growth performance of the crop or will cause the seed not to germinate.

### Conclusion and recommendations

It is hoped that the participants will share the farming knowledge they have learned in the workshop with other villagers and practise it when they returned back to their village. Other than that, the next training can be more practical to the Penan community, for them to understand easier. Some recommendations of topics include identifying suitable soil or area for farming, preparation og planting bed. More information is requested on the use of organic fertilizer, organic pesticides and herbicides, because their area is very far from town. The methods can teach them to be more independent and to try utilize all of the resources available in their area.

## Appendix 1



Figure 1: Introduction and ice-breaking session by Dr Petrus with the local participants.



Figure 2: Demonstration on seed selection by Dr Petrus.



Figure 3: Penan participants get one bottle of EM for making organic compost.



Figure 4: Mr Make shared in the workshop.



Figure 5: Penan participants get two paint pails each at the end of the workshop.



Figure 6: Vegetables seeds distributed to the participants.

## Appendix 2

Senarai kehadiran untuk latihan tanaman di Lg Seridan 23 - 24 Februari 2017				
No	Nama	Kampung	Tandatangan	
			23/02/2017	24/02/2017
1	Cherry Gading	Lg Kawa		
2	Asai Berat	Lg silang		
3	Berim Berat	Ba Marong		
4	Sagung Raja	Ba Marong		
5	Wong Berat	Lg silang		
6	Simon Ngo	Lg Cesuan		
7	Ziti Wec	Lg Cesuan		
8	Sarah Lubat	Lg Kawa		
9	Robert Amat	Lg Ludin		
10	Bungan Siden	Lg Ludin		
11	Daniel Loheng	Lg Ludin		
12	Melisa Roland	Lg Ludin		
13	Sayur Kut	Lg Meraan		
14	<del>Rita</del> Rita kut	Lg Meraan		
15	Rosemary	Lg Meraan		
16	Liza Miyet	Lg Meraan		
17	Roslind Ali	Lg Meraan		
18	Lali Uyok	Lg Meraan		

19	Janice kut	Lg Meraan		
20	Robin su	Lg Meraan		
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