

Report:

Science Advice by Practice: Communicating Agroforestry Business Plan of Forest Farmer Groups to the Village Authority in Parungpanjang, Bogor, West Java, Indonesia

Glossary

BP2TPH	: <i>Balai Penelitian dan Pengembangan Teknologi Perbenihan Tanaman Hutan</i> (The Center for Research and Development on Forest Plant Seeds Technology).
KHDTK	: <i>Kawasan Hutan dengan Tujuan Khusus</i> (Forest Areas with Special Purpose). *Special purposes here means for research and development and/or education.
BLI	: <i>Badan Litbang dan Inovasi</i> (Forestry Research and Development Agency) *Agency under the Ministry of Environment and Forestry of the Republic of Indonesia
Kulin KK	: <i>Pengakuan dan Perlindungan Kemitraan Kehutanan</i> (Recognition and Protection on the Partnership of Forest Area).
SK	: <i>Surat Keputusan</i> (Decree).
KTH	: <i>Kelompok Tani Hutan</i> (Forest Farmers Group).
UPT	: <i>Unit Pelaksana Teknis</i> (Technical Implementation Unit).
HP	: <i>Hutan Produksi</i> (Production Forest).
Perhutani	: <i>Perusahaan Umum Perhutanan Indonesia</i> (Indonesian State-owned Forestry Company).
PSKL	: <i>Perhutanan Sosial dan Kemitraan Lingkungan</i> (Social Forestry and Environmental Partnership). *A directorate under the Ministry of Environment and Forestry of the Republic of Indonesia.
P4W	: <i>Pusat Pengkajian Perencanaan dan Pengembangan Wilayah</i> (Center for Regional Systems Analysis, Planning and Development).
BUMDes	: <i>Badan Usaha Milik Desa</i> (Village-owned Business Unit).
Bappeda	: <i>Badan Perencanaan Pembangunan Daerah</i> (Regional Development Planning Agency)
DPMD	: <i>Dinas Pemberdayaan Masyarakat Desa</i> (Village community empowerment office)
FKKM	: <i>Forum Komunikasi Kehutanan Masyarakat</i> (Community Forestry Communication Forum)
Litbang	: <i>Penelitian dan Pengembangan</i> (Research and Development)
NGOs	: <i>Non-Government Organizations</i>
SK	: <i>Surat Keputusan</i> (Decree)
SKU pertanian	: <i>Surat Keterangan Usaha Pertanian</i> (Agricultural Business Certificates)

UMKM	<i>Usaha Mikro Kecil dan Menengah (Micro, Small and Medium Enterprises)</i>
UPT	: <i>Unit Pelaksana Teknis (Technical Implementation Unit).</i>
WIB	: <i>Waktu Indonesia Bagian Barat (Western Indonesian Time)</i>
TP2PS	: <i>Tim Penggerak Percepatan Perhutanan Sosial (Team for Accelerating Social Forestry)</i>
DPK	: <i>Dinas Pertanian dan Kehutanan (Agriculture and Forestry office)</i>

Background

The Center for Research and Development on Forest Plant Seed Technology (*Balai Penelitian dan Pengembangan Teknologi Perbenihan Tanaman Hutan, BP2TPTH*) is one of the Technical Implementation Units (*Unit Pelaksana Teknis, UPT*) under the Ministry of Environment and Forestry's Research and Development Agency (*Badan Litbang dan Inovasi, BLI*) which has the authority to manage forest areas under Law No.41 the year 1999 on Forestry c.q *Article 8* regarding Forest Areas with Special Purposes (*Kawasan Hutan Dengan Tujuan Khusus, KHDTK*) for research and development purposes. Forest Areas with Special Purpose (*KHDTK*), which (*Balai Penelitian dan Pengembangan Teknologi Perbenihan Tanaman Hutan, BP2TPTH*) manages, is *KHDTK Parungpanjang*. This determination is legally stated by the Decree of the Minister of Environment and Forestry Number *SK.169/Menlhk/Setjen/PLA.0/2/2019* dated February 25th, 2019 on Determination of Forest Areas with Special Purposes in the Production Forest Area located in Parungpanjang District, Bogor Regency, West Java Province covering ± 100 Hectares as Research and Development Forest. Before being stated as *KHDTK*, the status of this forest area was the Research Forest under *Perhutani Unit III* administration area of West Java and Banten, which was cooperated starting in 1991 until the present. The Research Forest was covering 134.6 hectares, but in 2019, 100 hectares of the research forest area converted to *KHDTK* under the management of *BP2TPTH*. The remaining 34.6 hectares of forest is still under the *Perhutani* administration.

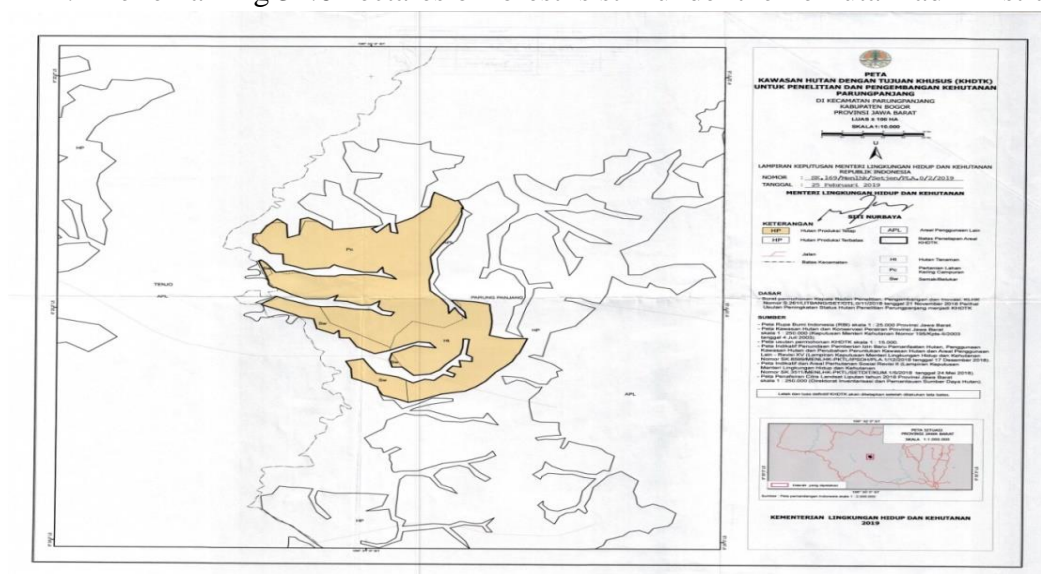


Figure 1. Area of Forest with Special Purposes of Parung Panjang

In managing Parungpanjang KHDTK, BP2TPH involves the surrounding community by providing access to arable land between the research trees. There are 86 (eighty-six) individuals who work in this area and are incorporated into forest farmer groups based on the proximity of their arable area. Four villages directly bordered by the forest, namely Tapos Village and Batok Village, are administratively located on Tenjo Subdistrict administration and Jagabaya Village and Gintung Cilejeut Village administratively located on Parungpanjang District. The most significant farmers are from Babakan Hamlet of Tapos Village and Taloktok Hamlet of Jagabaya Village.

Two Forest Farmer Groups (Kelompok Tani Hutan, KTH) obtain permits to manage arable land through the Social Forestry scheme. It is legalized by the issuance of the Forestry Partnership Recognition and Protection Decree (Kulin KK), namely KTH Harapan Sejahtera under the decree number SK.7087/MENLHK-PSKL/PKPS/PSL.0/8/2019 covering 10.75 hectares and KTH Guna Bakti under decree number SK.7089/MENLHK-PSKL/PKPS/PSL.0/8/2019 covering an area of 8.75 hectares in August 2019.

The farmers have been practicing agroforestry in their arable land by planting *galangal*, lemongrass, dry land's rice, maize, cassava, small potatoes, and bananas in between the researched trees. The farming practices provide additional income for the households of farmers. In addition to farming on arable land, women farmers also produce *Boboko* or bamboo-plaited baskets to increase household income.

Developing a collective-based business model for the Forest Farmer Group is essential to ensure an increase in farmers' income and the sustainability of the agroforestry program in Parungpanjang's KHDTK. The agroforestry practice only by planting and then selling the fresh yield to collectors who come to their fields at a price determined by the collectors. The income from the sale of galangals and other crops so far is still Low, and agroforestry contributes only around 16.02% of farmers' total revenue. After getting the Decree, the two KTH's have not made plans to scale up the program, especially economic development. Thus a workshop is needed to facilitate the two Forest Farmer Groups (KTH) in designing a collective business model and detailed financial business plan.

BP2TPH identified that this business plan would be successful if KTH could be connected to the nearest Village Owned Enterprise (BUMDes). Therefore, they must communicate the results of the agroforestry business plan workshop to the Village Government. However, BP2TPH still lacks experience in communicating evidence to village authorities. Therefore, BP2TPH should be capacitated through science advice workshops to improve their ability to share evidence from the field, such as the agroforestry business plan workshop.

Realization

The realization of this activity is in the form of two workshops which will be held in October and December 2021.

Workshop I : Science Advice by Practice: Communicating Agroforestry Business Plan of Forest Farmer Groups to the Village Authority in Parungpanjang, Bogor, West Java, Indonesia.

Venue on BP2TPTH office, Cihelut-Bogor, Date on 27 October 2021 with hybrid offline and online, with participants 27 male, 7 female (offline) and 3 male, 2 female (online).

Workshop II: Preparing a business plan, integrating KUPS development into village economic development

Held in KHDTK Parungpanjang , on 1 December 2021, with participants 15 male, 6 female, and from INGSA online.

Workshop I

- Bagus Novianto, S.Hut., M.P (Head of BP2TPTH)
- Prof. Dr. Abhi Veerakumaras ivam (Chair of INGSA-Asia)
- Thomas (Facilitator)
- This activity is a medium of communication. I hope those policy ideas will be discussed here, especially about community empowerment.
 - This program helps two farmer groups in Parungpanjang
 - I hope that this activity will be beneficial for the community around the forest area.
 - This workshop will be followed up in the Parungpanjang area
 - This program is expected to be integrated with local BUMDes (Badan Usaha Milik Desa, Villages-owned Enterprises).
 - This activity is an opportunity for alumni to share experiences to provide knowledge
 - This workshop will become an opportunity to formulate a strategy for developing a sustainable agricultural industry
 - After this workshop, there will be a follow-up activity.
 - All the participants have an opportunity to submit their proposals to INGSA for seed grants.
 - The expected result is a collaboration between parties.
 - This activity tries to implement the program using a participatory method.
 - The concept is local resource-based business development with participatory methods.

Aims:

1. Strengthening KTH (Kelompok Tani Perhutanan, Agroforestry group farmers) capacity with participatory methods.

2. Building collaboration between the parties by developing the business.

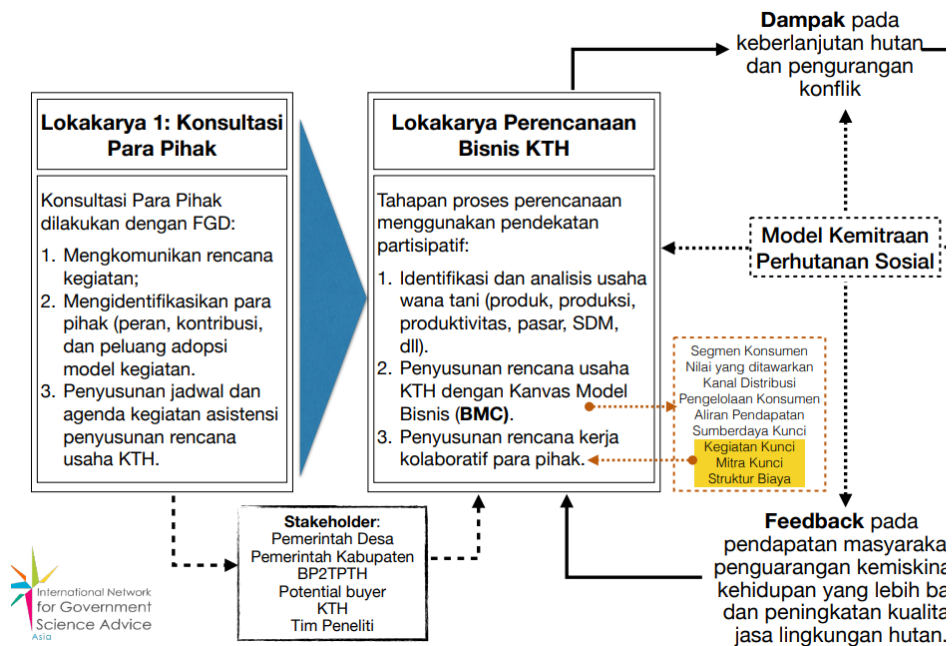
• Expected results:

1. KTH group business plan

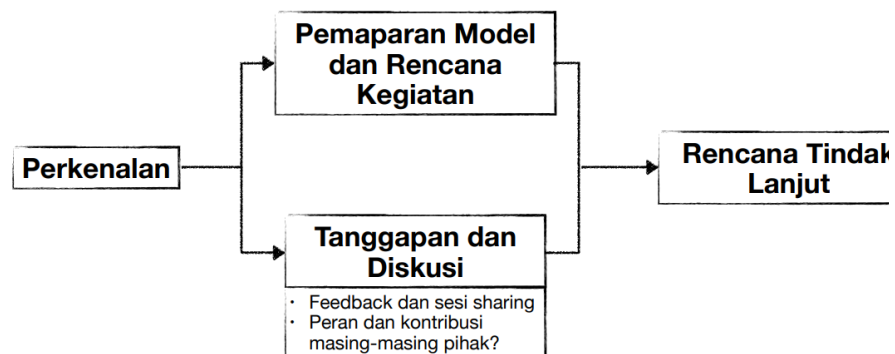
2. Market accessibility

3. Involvement of the stakeholders for the sustainability of the program.
 4. Adoptable methods to other farmer groups, especially around Bogor.
- The planning process for this activity will lead to an impact on forest sustainability and community livelihoods.

|..... Proses Kolaboratif|



Agenda Hari Ini



- Asmadi :
- The primary commodities are galangal
 - Today's condition the price is down Rp.500/Kg

- (Farmer representative)
- The activity is not running because the output has not been harvested and its root is rotten.
 - Market access is still a problem for the farmer.
- Rahma Wijaya : (Head of village)
- In the future, farmer groups will be integrated with BUMDes
 - The available budget is Rp. 100 million but there is no plan for activities and funds.
 - Previous plans for tourism development, but not yet implemented.
 - I am interested in the development of galangal processing, thereby increasing the added value.
 - The current problems with galangal are price and marketing
- Thomas : (Facilitator)
- This program is interesting if it is related to BUMDes and is suitable to be associated with tourism development.
- Lina :
- 50% to 60% of villages are adjacent to forest areas.
- Village Community Empowerment Office (Dinas Pemberdayaan Masyarakat Desa, DPMD, Kab. Bogor)
- We hope that BUMDes will become a pillar of the community's economy.
 - We have an experience, a successful story in Sinar Jaya village, Suka Makmur sub-district, Kab. Bogor intersects with forest area and develops national forest. Currently, the village is in the process of promoting a safari park with a fund of around 1 billion. This project has attracted several NGOs to be involved in the development of Sinar Jaya Village.
- We are currently in the business development stage in Sinar Jaya Village, and the community has succeeded in selling its coffee.
- Currently, the community is very interested in development related to local content in the village.
 - Another success story happened in Tangerang, where people link nature tourism with culinary tourism
 - I have not found BUMDes that process or produce agricultural products. So far, I have only found BUMDes that play a role in marketing agricultural products.
 - Therefore, it is very interesting for me if BUMDes is involved in agricultural development from production, management, to marketing.
 - I also suggest starting from the first business plan in BUMDes.
- Thomas : (Facilitator)
- How to integrate the potential of the village with BUMDes? maybe we will focus on this in these workshop activities.

- Tuti Diana : • The coffee development business has been running by collaborating with culinary and tourism businesses.
- Cooperatives and Micro, Small and Medium Enterprises Office (Dinas Koperasi dan Usaha Mikro Kecil dan Menengah, UMKM, Kab. Bogor)
- There are two options for developing a community business: Firstly, if you choose a cooperative, the advantage over BUMDes is that there are direct benefits for members.
- Secondly, in cooperatives, members get the rest of the results of their operations. Meanwhile, through BUMDes the benefits will be shared by the community in the village.
- BUMDes or Cooperatives are both equally good
- Thomas : We hope that the Cooperatives and Micro, Small, and Medium Enterprises Office can attend the next workshop, community business development. Regarding whether we will choose BUMDes or Cooperatives, we can talk about it later.
- (Facilitator)
- Aji : • Based on the previous two points, there are two problems; price and marketing
- Team for Accelerating Social Forestry (Tim Percepatan Perhutanan Sosial)
- Regarding production patterns, there are obstacles, because people usually produce based on culture and habits.
- The community does not oversee the market potential that can be developed further.
- The question is whether we want to change the cropping pattern that is more productive or persists with the same pattern.
- I offer an investment opportunity related to growing corn for a larger area. If Parung Panjang farmers are interested, I can help you collaborate with them.



- Thomas
(Facilitator) : Later, we will compare several commodities that are possible to be developed because there is a large area of land that is possible to be developed.
- Cecep
Regional Forestry Service Branch II
(Cabang Dinas Kehutanan Wilayah 1) :
 - One of the programs, which serves as a pilot project for honey bee cultivation, tourism, and coffee, is our assistance in Social Forestry in the Puncak Lestari area.
 - We may need to explore the potential of Social Forestry in Parungpanjang, so we don't just focus on galangal. We may be able to develop honey bee cultivation and other potentials.
 - Suggestion: various agencies can carry out agroforestry activities by collaborating on agriculture, animal husbandry, and fisheries.
 - We hope that in the future there will be a collaboration between agencies for the economic development of the community in Parungpanjang.
 - Currently there is also a program from the Governor of West Java, namely a millennial farmer, for forestry and focusing on mushroom and honey bee cultivation. Parungpanjang farmers may later be able to join this program.
- Thomas
(Facilitator) : I'm building a module. I hope we can work together for community development.
- Eka
Agriculture and Forestry Office
(Dinas Pertanian dan Kehutanan Kab. Bogor) :
 - We are from the plantation sector focus on coffee, cloves, and nutmeg. We are currently developing Bogor coffee
 - I would like to provide input regarding the galangal plant. Because the location is in Parung Panjang, we suggest the farmers can coordinate with the head of UPT Region 2 Parungpanjang who can support the cultivation and marketing of galangal.
- Endi Rohendi
Regional Development Planning Agency :
 - Until now, there is no such kind of Memorandum of Understanding (MoU). I suggest that there should be an MoU first.
 - We also need to study the potential of culture and markets.
 - I have several examples related to examples of development and land use in the community. In Pamijahan sub-district, they produce rice and BUMDes helps in marketing it. Then, in Tanjung Sari, several

- (Bappeda Litbang Kab. Bogor)
- community groups produce coffee, then BUMDes market it. Some farmer groups also work with cooperatives. It doesn't matter whether to choose BUMDes or cooperatives.
- In terms of human resources and the community, it is necessary to connect the potential of the community with the potential and authority of the relevant agencies.
- Andri Sentosa
Community Forestry Communication Forum
(Forum Komunikasi Kehutanan Masyarakat, FKKM)
- The government has five social forestry schemes. Parungpanjang, is part of a forestry partnership. The licensing process for management will take time. Currently, two farmer groups are being assisted.
 - I have some suggestions. First, facilitators need to enrich the community by studying other natural potentials that may be developed. Second, farmers need to open their minds to other products, so that the development of forest areas does not only depend on galangal. Farmers can add another natural potential.
 - We may be able to build and empower BUMDes from this program.
 - FKKM is open to communicating and learning together.
- Thomas
(Facilitator)
- : Can we now determine the time and location for the next activity? I hope that in future activities, BUMDes will become the driving force for village development.
- Desmiwati
(FTSTRDC)/
BP2TPTH
- : November, is about two days for discussion activities to explore potency and business plans.
- Lina
Village community empowerment office
(Dinas Pemberdayaan Masyarakat Desa, DPMD)
- : We will go to Parungpanjang tomorrow. Then, we will coordinate with the village head.
- Desmiwati
- : Location of social forestry adjacent with four villages
- In the 1990s, this area was a research forest covering an area of 134 Ha, with large plantations, almost all forestry plants were there

Forest Tree
Seed
Technology
Research and
Development
Center
(FTSTRDC)

- In 2019, this area became the status of a special purpose forest area (KHDTK) Parung Panjang, with an area of 100 hectares, while 34 hectares are still in collaboration with Perhutani

(Indonesian State Forestry Public Company)

- This area is a research forest, so the tree spacing is wide. Between these large plants, the community uses them for intercropping plants (Agroforestry).

Balai
Penelitian dan
Pengembang
an Teknologi
Perbenihan
Tanaman
Hutan
(BP2TPTH)

- At the beginning of 2018, 130 farmers in this area were actively working on the land, which was then evaluated. Currently, the remaining 86 farmers are managing from land with an area of 0.25 Ha to 1.5 Ha.

- In 2019, we applied for social forestry and received two decrees for 2 KTH. The number of farmers who are members of the KTH Guna Bakti is 21 people and manages an area of 10.75 Ha. Then, KTH Sejahtera consists of 19 farmers and manages 8.75 hectares. The rest are in the process of being submitted.

- In terms of agricultural potential, we have observed that the potential is intercropping plants that have been tested for decades. Galangal is a plant that is strong enough to survive. We have discussed many solutions to the problem of galangal.

- Processing is an idea that arises to add added value so that the galangal output does not rot.

- We plan to submit an SKU Pertanian (Agriculture Business Certificate) and will cooperate with the Bappeda Litbang Bogor.

- We will also coordinate with the village empowerment office.

- We have encouraged women's farmer groups to be active

Endi Rohandi :
Regional
Development
Planning
Agency

- There will be potential collaborations that can be explored at the Bappeda Litbang Bogor.

- An example is KTH Taman Sari which manages 70 ha of land for vegetables. This is an example of land use.

- There is potential in Parung Panjang, hopefully, it can be implemented in a participatory way.

(Bappeda
Litbang
Bogor)

Thomas O.V : Conclusion:

(Facilitator)

1. This activity is important to be encouraged by involving the parties according to their roles and functions so that this business is successful and has an impact on the community
2. This workshop is a learning process so we hope that all parties can attend the next activity.
3. Encouraging the role of village organizations to have multiple accesses in development, one of which is through BUMDes, which can become a pillar of village development
4. The next planned activity is in November.



Workshop II

Desmiwati : Opening the event, thanking the farmers for attending. Informing that this is a series of workshop activities, the first of which was held in October in Bogor, brought in policymakers from various agencies who could support the activities of smallholders in KHDTK Parungpanjang. For today we will draw up a business plan that we want to develop in KHDTK and be supported by the village. Thank you also to the agricultural and forestry extension workers who were present, who will later help facilitate this activity. As for the main facilitator, there is Mr. Thomas from IPB who will help, welcome.

Ridwan and Mrs. Deti (Agriculture Counseling) : Thanks to KHDTK Parungpanjang and BP2TPTH. I am Ridwan as the agricultural extension coordinator for the Parungpanjang and Tenjo areas, and my colleague Mrs. Deti is in charge of Tapos Village. Sorry, the Head of UPT could not attend an event in the district. The points to be achieved are carried out according to the plan. We are very happy to be invited, we also support activities based on agriculture, we share the same object to improve the welfare of farmers, the issue of the dynamics of agriculture and forestry in the future. We at UPT include Parungpanjang and Tenjo sub-districts, 20 villages, 123 assisted farmer groups, our office is in Jagabaya, Pandawa Village, next to a public high school, it's a farmer's house, please stop by, hopefully, you can find a solution, hopefully, this event can be useful, prosperous farmers in sustainable forests.

Dadi Supriadi (Forestry Counseling) : I just became a forestry instructor in Bogor Regency, my name is Dadi Supriadi, a forestry counselor, in the target area of Tenjo and Parungpanjang sub-districts, I have only been here for 6 months, I came here when I submitted the KUPS decree. I will try to collaborate with existing programs to improve farmers here, so several activities can increase the group's economic activities. As a form of service, for facilitation, especially regarding Forestry.

Thomas (Facilitator) : I introduce myself, I'm Thomas, I live in IPB every day, living in Dramaga. Today we try to learn about preparing a business plan. So we will try to draw up a business plan, I have knowledge, ladies and gentlemen, experience, we are not talking about problems. We're talking about merchandise, what are the advantages of our galangal, how many are there, if someone buys it using a pick-up, how much can we afford, etc. What are the advantages of the goods or products we sell?. Doing any cultivation in the garden that is currently being done.

Let's just start, first about how to make a plan, usually looking for problems, this time not, but dreaming first, which can be achieved. The idea is that if we have galangal, what can we do. How much is the galangal,

how much land is there, marketing, we design a business plan Dream determination?.

*what is the product, how much is it, usually how to sell it Conduct a small group discussion

(10.11 WIB, about 15 minutes).

Menentukan Mimpì

Apa mimpi atau perubahan apa yang diinginkan pada produk yang akan dikembangkan ?

AKU INGIN !

Mari diskusi bersama

Drawing, if it's been 20 years or so, what kind of business do you want to do with galangal, what is it processed, can it also be combined, big pictures, all of them are drawing... after being drawn 10:41 am, plenary discussion, presentation of the two groups, current conditions, and dreams for the future.

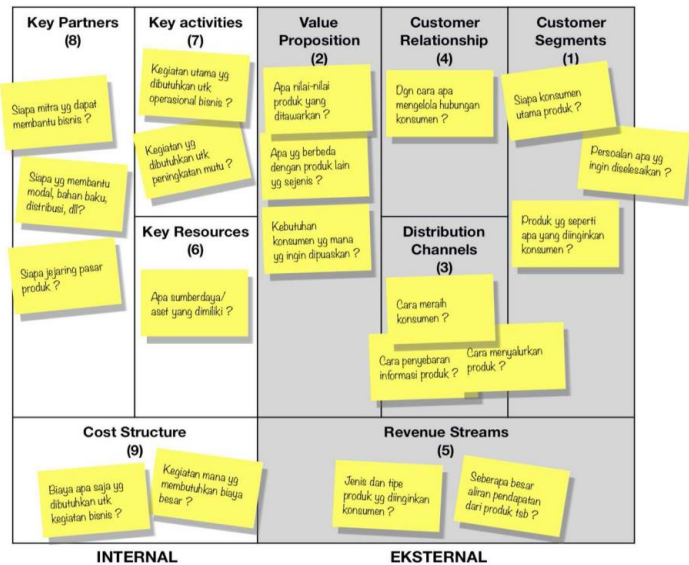


Are you sure you're not sure about your dream, it's better what can be developed better, for example from home being taken to the forest?. Then go back to the group If the dream is like that, it means that his efforts must

be focused. Which one can be developed faster. What product do you want to choose? Next in small group discussion

**Mencari,
Menemukan,
Mendesain**

AKU MAU !



Search, find, and design process:

1 (customer segments): who are the main customers of the product, what problems do you want to solve, what kind of products do consumers want

2 (value proposition): what are the values of the products offered, what is different from other similar products, which consumer needs do you want to satisfy

3 (distribution channels): how to reach consumers, how to disseminate product information, how to distribute products

4 (customer relationship): how to manage customer relationships

5 (revenue streams): the types and types of products that consumers want, how big is the income stream from these products

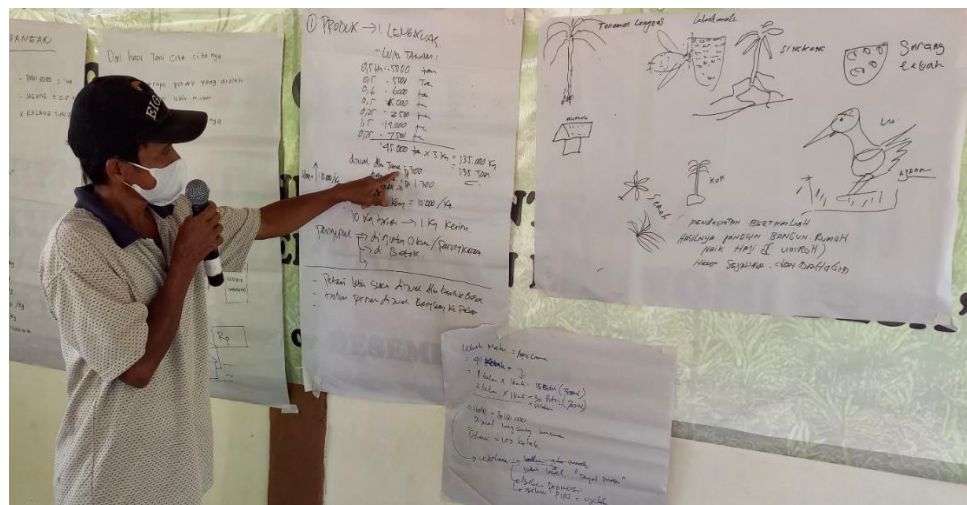
6 (key resources): what resources/assets do you have

7 (key activities): the main activities required for business operations, activities required for quality improvement

8 (key partners): who are the partners who can help the business, who help with capital, raw materials, distribution, etc., who are the product market networks

9 (cost structure): what costs are needed for business activities, which activities require large costs

1. target market: If our product is good, where is the market, who sell it to, who is the target: buyers, collectors, entrepreneurs, where?
2. the advantages of our products, so that people want to buy, what advantages do we offer?
3. how to let our buyers know how to let buyers know we have the goods: leaflets, social media, etc.
4. how to get people to buy once and then buy again sustainable
5. What is the shape of our product: is galangal wet or galangal dry? What kind of goods do we want to sell? Is it a good price with wet? Dry powder, the price of 10,000 IDR is good or not? Provide added value. Galangal from 300 to 10,000 IDR, how do you do it
6. To be so, what do we have? Our assets or capital
7. so that we can produce earlier, what activities do we need
8. Who do you think can help us?
9. Approximately how much capital is needed for us to do that, from wet to dry







Financial Report

Financial Report for INGSA Activity Project

"Science Advice by Practice: Communicating Agroforestry Business Plan of Forest Farmer Group to the Village Authority in Parungpanjang, Bogor, West Java, Indonesia"

No	Description	Volume	Unit (IDR)	Total (IDR)	INGSA
	Support by INGSA				8.076.660
1	Lunch meal 27102021	35 persons	16.000	560.000	
	Lunch meal 01122021	24 persons	16.000	384.000	
2	Snack, coffe, tea 27102021	35 persons	10.700	374.500	
	Snack, coffe, tea 01122021	24 persons	11.250	270.000	
3	Flipchart, spidol, battery	1 package	38.160	38.160	
4	Participant transportation assistance	43 persons	150.000	6.450.000	
	Total expenses			8.076.660	8.076.660

Conclusion

These two workshop activities have bridged how the practice of science advice by practice has been carried out, especially to develop a collective plan and mutual understanding between the local authority and forest farmer groups. The workshop has also improved BP2TPTH staff to communicate evidence from the grassroots community to the village authority. And also to strengthen the institutional capacity of KTH Harapan Sejahtera and KTH Guna Bakti through the assistance for the formulation of agroforestry business plan of farmer groups which is

integrated into village economic development. The workshop process is also very participatory and all participants are active, this is a form of capacity building for KTH members.

Appendix

1. The bills for the expenses incurred
2. List of attendees