

# **Agribusiness Incubation: Good Practice Assessment and Training Module**

**IAA-IPB**

**Incubator for Agribusiness and  
Agroindustry – Agricultural University  
Bogor, Indonesia**

**CASE STUDY**

Prepared for *infoDev* by

**Agrifood Consulting International**



In association with

**Economic Transformations Group**



# INCUBATOR FOR AGRIBUSINESS AND AGROINDUSTRY AT BOGOR AGRICULTURAL UNIVERSITY (IAA-IPB)

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## **ABBREVIATIONS**

| <b>Acronym</b> | <b>Explanation</b>  |
|----------------|---|
| <b>AABI</b>    | Asian Association of Business Incubations                                   |
| <b>AIBI</b>    | Association of Indonesian Business Incubators                               |
| <b>APIN</b>    | Asia Pacific Incubation Network   |
| <b>BMG</b>     | Bogor Municipal Government  |
| <b>BULOG</b>   | National Logistic Agency  |
| <b>CME</b>     | Coordinating Ministry of Economics  |
| <b>ERDC</b>    | Entrepreneurship Research and Development Center                            |
| <b>IAA</b>     | Incubator for Agribusiness and Agroindustry                                 |
| <b>IAA-IPB</b> | Incubator for Agribusiness and Agroindustry , Bogor Agricultural University |
| <b>ICMSME</b>  | Innovation Center for Micro and SMEs  |
| <b>IPB</b>     | Bogor Agricultural University   |
| <b>IT</b>      | Information Technology  |
| <b>LPM</b>     | Institute for Community Services  |
| <b>LPPM</b>    | Institute for R&D   |
| <b>MCSME</b>   | Ministry of Cooperative and Small Medium Enterprises Development            |
| <b>MNE</b>     | Ministry of National Education  |
| <b>MOA</b>     | Ministry of Agriculture   |
| <b>MOH</b>     | Ministry of Health  |
| <b>MOI</b>     | Ministry of Industry and Trade  |
| <b>MOL</b>     | Ministry of Labor   |
| <b>SME</b>     | Small Medium Enterprise   |
| <b>UNDP</b>    | United Nations Development Programme  |

## **PREFACE**

This case study is based on a mission conducted by Francesco Goletti and Nguyen Thi Thu of Agrifood Consulting International (ACI) to Bogor. The mission was facilitated by the generous and extraordinary talented team of the Incubator for Agribusiness and Agroindustry Agricultural University of Bogor (IAA-IPB) and including Professor Dr. Hadi K Purwadaria (Senior Advisor and previous founder and Manager of the IAA-IPB between 1995 and 2008), Mr. Deva P. Almada (Assistant Manager Program) , and Mr. Asna Jauhari (Assistant Manager Resources).

During the visit to the incubator (February 12-18, 2011), the ACI team had the opportunity of meeting numerous incubatees and stakeholders, both in Bogor and other localities in West Java. Professor Hadi and his colleagues organized a mission which was extremely useful. A video team accompanied the mission between February 13 and February 17 both in Bogor and other locations in West Java.

The Mission had the opportunity to meet with the senior managers of the IAA-IPB and the related institutions that govern the incubator, including the Director of the Institute of R&D and the Rector of the University. The Mission also witnessed the inauguration of the new incubator building on February 13, 2011.

The mission would like to thank all the incubator staff and in particular Professor Hadi and Mr Deva P. Almada for their full support and assistance during the entire duration of the mission.

Special thanks go to all the incubatees who have contributed generously with their time and made the visit a delightful learning experience.

Francesco Goletti

## **SUMMARY**

1. Since 1995, the Incubator for Agribusiness and Agroindustry at the Bogor Agricultural University (IAA-IPB) has assisted a number of small and medium enterprise (SME) startups to grow and mature into sustainable enterprises. The incubator is part of the Bogor Agricultural University, located in West Java, Indonesia.
2. The incubator's small and dedicated staff has assisted over 80 enterprises, of which 30 have already graduated. The incubator initial focus was on agribusiness and agroindustry only. More recently, since 2009, IAA-IPB has started to expand its focus to include handicrafts, IT, textile, and leather while utilizing the innovation of green technology to the greatest possible extent. This shift of focus is the result of a request by the Bogor Municipal Government and the perception that no other institution in Bogor provides similar incubation services. More than 70% of the incubatees will however remain from the agribusiness/agroindustry sector.
3. The services provided by the incubator include access to office space (for the resident incubatees), and infrastructure (including meeting and training rooms, processing equipment and plants, labs), research and technology services, advisory and business development services, training, networking with business community and financial institutions, facilitated access to promotional programs such as credit programs at subsidized interest rate.
4. Services are provided on a one to one basis for the entire period from acceptance into the incubator program until graduation, a period taking about 3 to 4 years. After graduation, the incubator management keeps relation with many of the graduates and keeps on providing assistance on a mutually beneficial basis. The most successful graduates are introduced to new incubatees and provide a role model; successful graduates by enhancing the image of the incubator also help the incubator promote its activities.
5. The incubator management has been very careful over the years to ensure self-sufficiency and the capacity of continuing operations. Starting with modest grants from the Ministry of Cooperatives and SME Development (MCSME) and the Ministry of National Education (MNE), the incubator has been able to support its own staff and activities. In particular, it has been able to facilitate access to credit for most of its incubatees, and provided training and advisory services through its own staff and the faculty of the university. The incubator has been successful in ensuring a large percentage of its incubatees to perform satisfactorily in credit programs sponsored by the Government. Compared to most other incubators in Indonesia, IAA-IPB can boast the performance in terms of incubatees' participation in credit program and sustainability of its own operations.
6. Through association with financial institutions, national and international incubators, universities in Indonesia and overseas, chambers of commerce, banks, local government, and national programs to develop SME and innovation IAA-IPB has been able to gain visibility and support for its activities. The IAA-IPB manager was nominated as a reviewer coordinator to evaluate applications of other incubators' establishment to access the MNE funding for SME startups.
7. Located for most of its history (from 1995 to 2010) on various premises of the Bogor Agricultural University, after a long but successful lobbying, the management of the IAA-IPB has

been able to get funding for a new and more spacious building that can host 14 tenants and a space for a food processing plant. Moreover, the IAA-IPB has also obtained funds and procured modern food processing equipment that will be used by incubatees.

8. Institutionally, the incubator is a division of the Entrepreneurship Research and Development Center (ERDC) which is under the Institute for R&D of the Bogor Agricultural University (IPB). By regulation of the university, the CEO of the incubator has to be a faculty of the IPB. Day to day management tasks are carried out by the Assistant Managers of the incubator assisted by a small support staff consisting of 1 technician. Additional administrative staff is shared with other divisions of the ERDC. The incubator and the center have considerable latitude in hiring, signing contracts, fund raising, networking, investing, and initiating programs. Overall supervision and legal support remain however with the university.

9. Management of the incubator has been collegial, flexible, and independent. For most of its history (from 1995 to 2008), its leadership has been given by a dedicated and reputed faculty who was also the founder of the incubator and has retired from the position of CEO in 2008. Fortunately, he has continued to provide advisory services and guidance to the present management of the incubator as Senior Advisor.

10. The main criterion for evaluating success adopted by the IAA-IPB is growth of sales. For incubatees over the first 3 years of their incubation period growth of sales has been about 30% and for graduates the average growth has been about 10% per year. These averages however hide considerable variation; successful graduates reach higher growth level. Some of the companies have matured to medium size (sales per year over \$1million). Out of 77 incubatees since 1995, 38 have graduated, 12 withdrawn from incubator, and 27 are still in the program. Over the period 2008-2010, sales for a sample of 29 enterprises for which it was possible to obtain data grew at an average of 14% per year.

11. In 2011, the incubator is at an important crossroad. Having established a reputation within West Java and Indonesia through the assistance and development of over 70 startup enterprises, including the growth of successful small and medium enterprises, and having been able to secure its own larger facilities and equipment that could provide assistance to a much bigger number of enterprises than in the past, the incubator could be at a beginning of a new page in its history whereas it will become a very important reference point in Indonesia, regionally in Southeast Asia, and possibly internationally.

12. The main challenges for the future are both internal and external. Internally, the incubator and the university will have to agree on a structure that allows the senior management, including the CEO, to be recruited from outside of the university and be responsible to a Board that provide true governance functions rather than only advisory functions. In the past, the incubator was fortunate to have a faculty fully committed and devoted to the incubator. This is a difficult condition to replicate; moreover, as the incubator expands it will require more specialized and full time involvement of its CEO than what was the case in the past.

13. Externally, the incubator will need more active support at the policy level including a clear policy framework for the development of incubation as a key process in the development of SME, particularly in agribusiness. So far such a clear policy is missing in Indonesia; yet the management of IAA-IPB and the university itself are actively engaged in formulating a presidential regulation for the promotion of incubators. This will give the necessary impetus to a stronger support by the local government to the development of the incubators.

14. Four key critical factors of success could be drawn from the experience of the past 15 years of IAA-IPB's experience. First, utmost importance needs to be given to the incubatees, both during the selection process and during the incubation period in order to ensure that they grow and are successful. Their success is the success of the incubator itself. One to one interaction with the incubatees is necessary to understand their problems and special needs, and help them find a solution.

15. Second, It is critical to ensure that the incubator has the resources necessary to carry out activities and support its own management and support staff over the long period. Over-investment in activities and staff, particularly at the beginning of the incubator program is not likely to be sustainable. The incubator has to prove itself with whatever limited resources it could master to obtain over a medium term period (at least 3 years).

16. Third, if additional resources are needed, then strategic partnerships and networking need to be established. In the case of IAA-IPB, access to infrastructure, facilities, and technical services was obtained through linkages with the university; access to credit for the incubatees through participation in nation-wide programs to support growth of SME; exposure to international experiences through training and participation in conferences sponsored by development partners and international networks; support from local government through collaborative linkages and networking with the municipality government; support from private sector through linkages with Chamber of Commerce and financial institutions.

17. Fourth, maintain relations with successful graduates. They will continue to need assistance from the incubator, and in turn they will be able to assist the incubator by providing a role model to new incubatees, and represent a source of income for the incubator itself through profit sharing or equity investment.

## 1 BACKGROUND AND CONTEXT

18. Since 1963, Bogor Agricultural University (IPB)<sup>1</sup> has been participating in several national development programs to increase farmers' income, and to develop farmer cooperatives and small and medium enterprises (SMEs) through various units under the coordination of the Institute for Community Services (LPM) at IPB. IPB programs in community services cover training, technology transfer, and consultancy in management in cooperation with various government ministries and agencies<sup>2</sup>, private sector, and international institutions.

19. On August 3, 1994 IPB established the Incubator Centre for Agribusiness and Agroindustry (IAA-IPB). The founding of IAA-IPB marked a new era in providing services for SMEs in an integrated program for a three year incubation period. Operations of IAA-IPB started in 1995.

20. Prior to 1994, IPB had been conducting a lot of training for SMEs and individual entrepreneurs; however the results of this training in terms of growing and self sufficient SMEs had been very limited. When the United Nations Development Programme (UNDP) introduced to Indonesia the concept of incubating startup SMEs, the Ministry of Cooperatives and SME Development (MCSME) offered small seed money for a period of three years to any institution who would be willing to establish business and technology incubator. Four institutions agreed to implement the incubator: IPB, BPPT–Serpong (Agency for Technology Assessment and Development), UNS– University in Solo, and ITS–University in Surabaya. IPB was the only one to focus on agribusiness and agroindustry.

21. IPB incubator was first named Incubator for Agribusiness and Agroindustry (IAA-IPB), and was founded as a unit under IPB. In a later development, it became one of the centers under the Institute for Research and Development (R&D) at IPB. In 2005, the incubator became a division under the Entrepreneurship Research and Development Center (ERDC). In 2008, the Bogor Municipal Government (BMG) pushed for expanding the focus of the incubator beyond agriculture/agribusiness/agroindustry and to include other types of SMEs such as those involved in handicraft, leather, and IT. An additional idea closely related to the original focus on agribusiness is to develop SMEs using innovations in “green energy” technology.

22. The incubator belongs to a center (the ERDC) under a state university (the IPB). Its facilities are located both at the main campus of the university at Darmaga (about 12<sup>3</sup> km from Bogor) and at the old campus in Bogor. Facilities include offices, with incubatees space, and sharing of other IPB facilities such as a food processing plant, workshops, and laboratories.

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<sup>1</sup> General information on the incubator could be obtained on the English version of the website at <http://www.inkubatoripb.com/index-e.php?nama=Home> (English)

<sup>2</sup> Such as the Ministry of National Education (MOE), Ministry of Agriculture (MOA), Ministry of Cooperative and Small Medium Enterprises Development (MCSME), Ministry of Industry and Trade (MOI), Ministry of Labor (MOL), Ministry of Health (MOH), National Logistic Agency (BULOG) and National Coordination Agency for Family Planning.

<sup>3</sup> In spite of the short geographic distance, the traffic make the road extremely congested and the short distance might take up to 1 hour.



23. In February 2011, the new incubator facility at Darmaga has been inaugurated: it is a **new building with a pilot plant and space for 14 resident incubatees (tenants)**. New equipment to be installed in the pilot plant has already been procured with funding by the central government.



24. In the process of initial start up, UNDP and MCSME only planned to set up three incubators in Indonesia (BPPT, UNS, and ITS). They organized a three-month training program in the Silicon Valley of the US for six persons (two persons per institution) who would be the key incubator management staff of the startup incubators. After the trainees' return to Indonesia, the three incubators were established.

25. Interestingly, while MCSME prepared the initial budget for the three proposed incubators it found out that BPPT as an executive body of the government had already his own annual budget. That made possible for an additional institution to participate in the incubator program. It was thus that IPB entered into the incubator program of MCSME. However, IPB had to learn everything by itself since it had missed the initial opportunity to participate in the USA training.

26. MCSME continued to support the incubators development in Indonesia by funding seed money for a three year period to each incubator (1994-1996). About 15 incubators were funded during this period.

27. In 1995, ten incubators from all over Indonesia set up the AIBI (Association of Indonesian Business Incubators) in Solo. The 10 founders included the (i) first four incubators, (ii) IKOPIN and UNPAD, two universities in Bandung, (iii) UNMER, a university in Malang, and (iv) three more private incubators. IPB was the only incubator focused on agribusiness and agroindustry, others are in general business or manufacturing even though they may have few agribusiness incubatees at the later stage.

28. In 1997, the Ministry of National Education (MNE) launched a program to start up incubators in the universities all over Indonesia following the MCSME model of providing only small seed money for a period of three year per incubator. At this time IPB was nominated reviewer coordinator and was assisted by UNS and ITS incubators to evaluate proposals from new incubators and monitor program implementation. The two incubators UNS and ITS dropped out of the MNE program around 2000 due to changes in management. IPB remained the only incubator to carry out the reviewer position for the MNE incubator program until 2007.

29. In 2000, MCSME introduced a special credit scheme for incubatees and provided funds for 10 incubators. Even though limited in size, the scheme provided considerable help to the incubatees. The fund amounted to 5,000 – 10, 000 USD per incubatees, and was limited to 10

incubatees per incubator. After eight years evaluation of the scheme, IPB came out as the top performer with incubatees returning 87% of the credit, while in other incubators performance ranged from total failure to only 60% success.

30. In 2009, the Coordinating Ministry of Economics (CME) founded the Innovation Center for Micro and SMEs (ICMSME) which provided funds to incubators on a competitive basis. This program only ran during 2009 -2010; in 2011, the whole budget was taken by BPPT. It will be interesting to monitor the development of the BPPT incubator after getting a big national budget in 2011.

31. In the same year of 2009, IPB incubator helped in reviving the AIBI through a national convention in Bogor. AIBI had been dormant since 1996 due to the death of its President. From 1998 to 2009, the manager of BPPT incubator assumed the position of the AIBI President but with very few activities. Currently, AIBI has joined international incubator associations such as Asia Pacific Incubation Network (APIN) and Asian Association of Business Incubation (AABI).

### **1.1 GEOGRAPHIC CONTEXT, PRIMARY SERVICE DOMAIN, AND PRIMARY CUSTOMERS**

32. Bogor Municipality is part of West Java. The municipality has a rapidly growing (2.8%) population of 4.2 million over an area of almost 300,000 ha. The budget of Bogor Municipality Government (BMG) amounts to 1.9 trillion Indonesian Rupiah (IDR) equivalent to about 0.2 billion USD, the second highest in West Java. The GDP of Bogor Municipality is 51.8 trillion IDR (fourth in West Java) with a growth rate of 6.04%.

33. According to the official BMG data (see [www.bogorkab.go.id](http://www.bogorkab.go.id)) there existed 35,147 micro and SMEs of which 1,291 small enterprises with 17,452 workers. *Dinas Perindustrian, Perdagangan dan Koperasi* (Office of Industry, Trade and Cooperatives) has been long supporting SMEs by providing training, and access to market and business loan. However, the training is often not targeting the specific needs of the SMEs and usually is not followed up by a mentoring program. Business loans are small: 20 to 50 million IDR (2200 to 5500 USD) per SME.

34. Almost 70% of SMEs in Bogor have asset below 200 million IDR (about 22,000 USD). For most enterprises sale volume is below 100 million IDR. SMEs in Bogor were reported to have limited market information, access to technology, access to working capital, and knowledge about distribution chain.

35. The primary service domain of the IAA-IPB consists of agribusiness and agroindustry SMEs; secondary service domain include handicraft, leather, and IT SMEs. Primary customers are the university (IPB) graduates and SMEs with 2-3 year experience. The geographic boundary of the incubator includes Bogor and West Java.

36. Limited budget has always been a constraint to provide good incubation for both resident and non-resident incubatees. In spite of networking by the incubator's management with the regional government, the support of regional government to the incubator so far has been very modest, partly because of a lack of clear policy from the central government. Currently, the IPB incubator is involved in a national team together with AIBI, coordinated by CME, to prepare a presidential regulation for national incubator development. This policy formulation and approval might however take 1-2 years.

## 2 TYPE OF INCUBATOR AND STRATEGIC VISION

### 2.1 STRATEGIC VISION, MISSION, AND TARGETS

37. The **vision** of the incubator is: Creating strong, independent, and growing SMEs. This vision has remained the same since the beginning of the incubator in 1995.

38. The **mission** statement of the incubator is: providing incubation services to help the growth of startup small scale enterprises in agribusiness and agroindustry into strong and independent enterprises ready to scale up to medium scale.

39. Recently the strategic focus has slightly changed from handling only agribusiness and agroindustry SMEs, to include handicraft, leather, and IT SMEs. This was in response to the interest of Bogor Municipality. The Municipality indicated that not only SMEs in the agroindustry/agribusiness sector but also SMEs in other sectors need incubating services, currently not provided by any other organization in the area.

40. The **strategic mission** of the incubator in the next 5 years is to have a strong management team, to use new facilities (building and equipment) effectively, to improve IT facilities to support incubatees, to be able to provide better remuneration to incubator staff and to help implementing the forthcoming president's regulation on incubator development.

41. The vision for the next 10 years is that the incubator could proudly stand up with other international incubators.

### 2.2 INCUBATOR'S DISTINCTIVE FEATURES

42. The four **distinguishing features** of the Incubator are:

- (i) Focus in agribusiness and agroindustry<sup>4</sup>
- (ii) Good networking with central government including active involvement of its staff and management in policy formulation related to national incubator development
- (iii) Making investment in successful graduates so as to obtain income from profit sharing
- (iv) Developing a post graduate program that can continue on assisting successful graduates

43. The incubators four **primary strengths** include:

- (i) Self sufficiency to allow surviving with a minimum operating budget
- (ii) Access to pilot plant, labs, and workshops of the university to support technology services for the incubatees
- (iii) Role model for other emerging incubators
- (iv) Dedicated management team

44. Its **primary weaknesses** include:

- (i) Limited space for incubatees
- (ii) Manager is part timer since he has to be a faculty staff
- (iii) Limited support from regional government

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<sup>4</sup> Also initiate green technology program for incubatees.

(iv) Limited financial resources for incubator operations

45. The **management proposes to augment** its existing strengths and overcome its weaknesses by:

- (i) Convincing the university to add more spaces for the resident incubatees
- (ii) Convincing policy makers to guide the regional government in supporting the incubator
- (iii) Strengthening the capacity of the assistant managers who are full time staff
- (iv) Starting implementing policy to draw more contribution from the incubatees since the initial incubation period

46. The **lessons** that can be taken away from the way in which the incubator has built up its strengths or compensated for its weaknesses since its founding and which might have value to other emerging incubators include:

- (i) Incubator must have a dedicated, full time, and capable management team
- (ii) Incubator should develop good networking with stakeholders such as policy makers, financial institutions, and markets
- (iii) The management must be confident in the ability to deliver successful incubatees

## 2.3 Networks and Partnerships

47. The four network relationships or partnerships most important to the success of the incubator have been:

| <b>Relationships and Partnerships</b>      | <b>Benefits</b>   |
|--|---|
| (i) Policy makers                          | Conducive environment for the incubator operation<br>Fixed assets (land)<br>Support through government programs related to incubators and SME development |
| (ii) Financial institutions                | Loans for incubatees  |
| (iii) University                           | Access to pilot plant, equipment, and labs<br>Access to technical expertise and research  |
| (iv) International incubator organizations | Opportunity to strengthen the capacity building, including knowledge and skill of the management team   |

48. The incubator has chosen to source competencies both inside and outside IPB, the university that hosts the incubator.

### 2.3.1 Inside Sources (within IPB)

49. The competencies sources within IPB cover specific competencies that the management team does not have. These include specific technologies and economics. The incubator also builds on the network of the staff of the university. For example, in the assistance to essential oil incubatees, the incubator builds on the fact that there is an IPB staff who holds the position of

Secretary General for the Association of Essential Oil Industry. Such IPB staff is recruited by the incubator as training and program consultant.

### **2.3.2 Outside Source (outside IPB)**

50. Outsourcing is related to competencies that do not belong to IPB; for example graphics design.

51. **A partnership is considered productive and useful** if it could support the incubator and incubatees with program funding; provide opportunities to strengthen the capability of the incubator and incubatees, and to promote the incubator and incubatees.

52. The incubator chose networks or partners who are or may be interested in SME development through incubation system. If during their first meeting, the potential network and partner express no interest, the incubator does not contact them again. So far, the incubator does not contact partner that could be competitor. At one point, the incubator invited a resource person for training from Swiss Contact, but that was when the institution had decided to limit the operation in Indonesia.

53. The key lesson learned is that developing strategic partnership to institutions who have the capability to support the incubator is essential to the life and success of an incubator.

54. The incubator does not directly involve in strengthening the farmer groups. However, the agribusiness and agroindustry incubatees either are the business units of the farmer groups (see fresh vegetable success story in APPENDIX 7) or own farmer groups that supply their raw material (see essential oil and handicraft success stories in APPENDIX 7). Thus, strengthening the incubatees is indirectly strengthening the farmer groups. Often, the credit going to the incubatees is used by the incubatees to invest in the farmer groups' operations.

55. The incubator does not involve in negotiation between the incubatees and the suppliers. The incubator rather helps the incubatees set up contract with buyers such as the contract between the fresh vegetable incubatee with supermarket, and fast food chain restaurant.

### **3 APPROACH TO INCUBATION**

#### **3.1 SERVICES PROVIDED**

56. The core services provided by the incubator to the incubatees include:

1. Office space and utilities for resident incubatees, at a very moderate rental cost.
2. Other office facilities, such as meeting and training rooms at no charge.
3. Free consultation for technology development, management improvement, and marketing plan.
4. Free training, business meetings, and workshops.
5. Access to processing plant and labs, with moderate charge on service basis<sup>5</sup>.
6. Free consultation for writing business plans required in credit application.
7. Facilitation in credit application. In particular, the incubator helps incubatees in looking for specific credit schemes with low interest from government programs. Size of this finance varies according to the type of business, but most incubatees have been able to get loans of at least Rp 100 million (about US\$11,000)

57. In addition to the core services, the incubator provides other services such as facilitation of attendance to international internships and exhibitions. Services have been provided according to the changing needs of each incubatee.

58. The approach of the incubator to service provision has been inspired by the idea that service charges should be applied with caution, particularly in the initial stages of a highly risk sector such as agribusiness. The incubator agrees about the need of standard charges for space and utilities, but charges for consulting services should either be very low or free in the view of the incubator management. Equipment and lab analysis charges should be on a service basis. A la carte basis is more appropriate for equipment and lab analysis since these services are not used regularly. Events such as training and business meeting are appropriate to be charged on a service basis. Regular services should be charged as part of a standard package.

#### **3.2 INSTITUTIONAL SET-UP**

59. The incubator exists as Division of Business Incubator which is part of the ERDC (Entrepreneurship R&D Center) under the Institute of R&D under the Agricultural University Bogor (IPB).

60. The research center (ERDC), the Institute of R&D (LPPM) and the university (IPB) each provide a positive environment for the incubator. The research center provides inter-disciplinary research and community services that complement the commercial focus of the incubator. The Institute with its 17 research centers is a source of multidisciplinary expertise available to the incubatees. The university, with all the specialized departments is a source of research and specialized knowledge that could be developed and commercialized.

61. The university also provides legal protection (eg liability insurance) to the incubator.

62. The Center three divisions (training, research, and incubator) work in complementary to each other. The training division support entrepreneurs in the general area of entrepreneurship and

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<sup>5</sup> The service fees go to the plant and labs not to the incubator.

more specifically in Corporate Social Responsibility (CSR) and Business Development Services (BDS).

63. The Center is 100% self-sufficient: the only support from the university is through the facilities that it occupies and the appointment of a part-time faculty as CEO. The Center can hire staff, sign contract (even though they need to be approved by the Director of the Institute of R&D), and can make investment. The Center reports to the Director of the Institute for R&D. The remunerations of the staff of the Center are under direct control of the Center.

64. Currently the Center plan to expand into a Regional Center for Entrepreneurship in association with the District of Bogor Government. The incubator plan is to have 30 incubatees/year over the next 5 years.

65. Perhaps one of the main limitations is the statutory regulation that the CEO of the Incubator must be a Faculty of IPB. This is supposed to be in order to have more control and closed linkage with the university. But there is an inherent conflict of interest between the duties of a faculty interested in research and a faculty interested in business development. In fact, the skills for business development and the skills for academic research are not necessarily the same. The IAA-IPB was quite lucky that since its beginning and up until recently the CEO was a faculty deeply committed to the success of the incubator and who took the development of the incubator almost as a personal mission. This situation is however not easily replicable in the future. Moreover, as the incubator expands, a full time CEO will be required.

66. The incubator tries to remedy to the institutional constraint of having a CEO as a faculty by appointing assistant managers from the private sector. Effectively, the assistant managers are the day to day managers and the ones that inform the CEO and advise him/her.

### **3.2.1 Governance**

67. The Board of the incubator is mostly an advisory body rather than a board with strategy setting, auditing, and decisions about the CEO.

68. The board of the incubator functions as advisory group to the incubator. The incubator benefits from the board in terms of help in broadening its network. The board includes Bogor Municipal and District Government, Bogor Chamber of Commerce, Rector of IPB, and banks. The background of the board member is as follows:

- i. Chair of Bogor Chamber of Commerce: businessman for real estate developer
- ii. Bogor regional officers: various backgrounds mostly economics
- iii. Bank officers: economics and business management
- iv. Rector of IPB: green house engineer

69. Since the CEO has to be a faculty staff by the university regulation, the CEO has permanent salary for his position as the faculty staff. For his work in the incubator, he is compensated on the basis of programs or projects found by him for the incubator: fee for finding the project, and remuneration for time spent in the project. Note that the incubator has been self sufficient since 2000, thus the projects it gained were sufficient for its sustainability.

70. The CEO is expected to allocate his time for the incubator out of teaching and research, and to link his research or other position such as adviser and assessor – if any – for the benefit of the incubator. There has been no dismissal of CEO so far. The first CEO stayed from 1995 – 2008, he is



also the founder of the incubator. The second one is relatively new and holds the current position from 2008.



## **4 BUSINESS MODEL**

### **4.1 OVERVIEW**

71. The business model of the incubator is based on three stages of the incubation process:

- (i) Early incubation: mentoring creative ideas, assisting in evaluation of market prospect, developing early business plan, defining and outsourcing technology need.
- (ii) Incubation: helping start production, consultation and revising business plan; providing facilitation for financial resources and market network.
- (iii) Post graduation program: consultation and revising business plan; providing facilitation for financial resources and market network for new products and new technology implementation.

72. In addition to government and development partners funding, the incubator supports its operation through other external programs such as design of agribusiness terminals, preparing manuals of packaging house, writing bank lending models for SME, etc.), and investment in successful graduates; and internal sources derived from space rental.

73. Space rental provide Rp. 300,000/40m<sup>2</sup> per month (to be increased to Rp. 500,000/50m<sup>2</sup> per month in 2011)

74. So far no charges for consultation, trainings and workshops have been applied; however the incubator did not cover travel cost of incubatees. Starting 2011, small charges will be imposed for these services but the amount is not yet decided.

75. The incubator has been self sufficient since 2000. Primary sources of funding in the last three years include:

- (i) Competitive based projects related to SMEs: fluctuations dependent on successful proposals and implementation of project.
- (ii) Grants for incubation program: declining from Rp. 330 millions in 2009, to Rp. 150 millions in 2010, and Rp. 100 millions in 2011 (1 USD = Rp. 9000). Note there was no grant in 2000–2008.

76. The proportion of earned income and subsidies is not fixed. In 2008 the incubator received no grant, in 2009 the ratio between project/grant was 1/6, in 2010 project/grant was 5/3, in 2011 not yet known. Break even for operating expenses is Rp 100 millions/year (about USD 10,000).

77. Primary expenses in last three years include:

- i. Salary for 2 permanent staff.
- ii. Remuneration for part time staff involved in the projects.
- iii. Travel for permanent staff.
- iv. Building and facility maintenance.

#### **4.1.1 Capital Assets and Facilities**

78. The incubator owns the following assets used in the delivery of services to incubatees:

- i. Offices and spaces for resident incubatees.
- ii. Own food processing equipment (since 2011) and access to food processing equipment in pilot plant of the university (since inception).
- iii. Own wooden toy workshop and access to workshops for manufacturing machinery in the university.
- iv. Access to laboratories for analysis in the university.

79. The land where the incubator is located belongs to the university (IPB). From 1995 to 2011, the incubator was provided an old building and access to pilot plants and labs of the university. The cost of new food processing equipment purchased in 2010 amounts to Rp. 5.5 billion (about \$611,000) and the new building costs around Rp. 2 billion (about \$222,000). Office equipment only costs Rp. 30 million, accumulated over 1995-2005.

80. In order to raise the capital for investment in fixed assets and equipment the incubator has been waiting for 15 years. Raising this type of capital has been very difficult.

81. In the future, the incubator will need vehicles for visits to non-resident incubatees. So far the incubator has been using private cars belonging to the manager and management team.

82. The major lesson for the incubator is that even with the great difficulty of raising capital for investment in fixed assets (new building) and equipment, the operations could continue albeit at a modest level. **The networking with institutions that could share their assets with the incubator was essential.**

#### **4.1.2 Cost of Services Provided**

83. The variable costs per incubatee per year fluctuated between Rp. 0.75 and 1.5 million (\$83 and 163). The cost covers for about 50 % training expenses, 30 % consultation using outsourcing experts and or travel expenses in case of non-resident incubatees, and 20 % facilitation to financial resource institutions.

84. The fluctuation in the cost depends on the funding the incubator could access in any fiscal year. Whenever access to more funding was secured then more activities and costs could be funded.

85. In Indonesia, other incubators may handle agribusiness and agroindustry but not as a major focus. A couple of agri-incubators emerged 10 years ago, but they are not in operations now, possibly due to weak management such as incubator in the University of Jember, East Java, and in the University of Mataram, West Nusa Tenggara.

#### **4.1.3 Some Key Lessons from the Incubator Management**

- i. Maximize the effectiveness of your cost.

- ii. Do not invest too much into public relations events (such as SME competition etc.) to promote your incubator.
- iii. Focus on spending that makes the incubatees successful. If you have successful incubatees, they will promote your incubator to the level that you will have a number of applications over your capacity.

## 4.2 STAFFING

86. . The core members of the management team are listed in the following table.

**Table 1 Core management Team at IAA-IPB Incubator, Background, Services Provided**

| No | Position in Management Team                    | Name                 | Business background                                      | Training (Education) Background  | Providing Services to SMEs In   |
|----|--|----------------------|--|----------------------------------|---|
| 1  | Manager (Head, division of Business Incubator) | Muslich              | Community services to SMEs                               | MS in Agroindustrial Technology  | Facilitation in Halal application to the authorized institution technology consultation |
| 2  | Assistant Manager for Program                  | Deva Primadia Almada | Eleven years working as full time staff in the incubator | MS in Postharvest Technology     | Program implementation, marketing including E-market, Business Plan writing,            |
| 3  | Assistant Manager for Resources                | Asna Jauhari         | Free lance consultant                                    | BS in Socio economics            | Business Plan writing, budgeting consultation, outsourcing for financial institution    |
| 4  | Senior Adviser                                 | Hadi K. Purwadaria   | Former manager 1995 - 2008                               | PhD in Food Process Engineering  | Overall services, networking to other stakeholders                                      |
| 5  | Technician                                     | Hikmat               | Technology implementation in SMEs                        | Vocational engineering education | Technology implementation, building and facility maintenance                            |
|    | Supporting Staff from ERDC                     | Shinta Wulansari     | More than 10 years in SME training                       | MS in Business Management        | Accounting, management consultation, internal event organizer                           |

Note: Technical secretariat and finance are supported by the ERDC staff

87. The management staff describes the incubator's management style of the core team as **collegial, flexible, and independent**. The core team discusses tasks and problems among themselves and with the incubatees; each person has a job description, and programs are

implemented in an integrated manner; and the management staff takes full initiative while in the field, but discusses later with other team members.

88. The primary competences contained in the management team include: (i) agricultural processing; (ii) economics; and (iii) entrepreneurship development. The competences are both the outcome of formal education and practical experience.

89. Part of the management team has been working together for over 10 years; the rest of the team joined in the last 3 years. The former incubator manager (Prof. Hadi K. Purwadaria) recruited one assistant manager by advertisement and job interview, then trained him from basic tasks. The current manager was appointed in 2008 by the university taking into account his track record in service to SMEs. The other assistant manager was recruited through a series of encounters where he had been a collaborating partner of the incubator program.

90. The core management staff has only local (Indonesia) marketing experience. The staff to client ratio is 5 (one staff to 5 incubatees. The services provided by the staff are indicated in Table 1.

#### **4.2.1 Leadership**

91. Strong leadership has been critical to the incubator success in four areas: 1) making critical decisions such as budget allocation on priority programs, and broadening the incubation focus from agricultural sector to embrace other sectors : IT, handicraft, and leather SMEs, 2) providing direction to the management team, 3) lobbying university policy makers frequently and considering that they are changing every five year while the incubator continues, 4) providing a figure on which incubatees could rely upon.

92. The IAA-IPB incubator has been lucky to have a continuity of leadership for most of its history (1995-2008). Since 2008 a new manager has been selected and momentum is building around the new manager. The previous manager still provides guidance as Senior Advisor.

93. In the words of the current management team, leadership within the incubator is described as follows: leading and directing a management team while you are listening to them, caring for the staff welfare in the limit of your budget, facilitating access of the staff to training (education), lightening up the management team frustration while hiding your own frustration, and once in a while evaluating their performances in an open forum.

94. The incubator has followed a few methods to develop leadership among incubatees, including:

- (i) Prove the incubator has wide network in business meeting for the incubatees by inviting stakeholders beneficial to them
- (ii) Be reliable in promises and services
- (iii) Solve the incubatees' problems
- (iv) Manage the internal conflict : among resident incubatees, between resident incubatees and their workers
- (v) Indicate that incubator is improving in knowledge and resources

95. The key lessons learned about leadership by the incubator's management team are two:

- (i) Do not make promises of services that you cannot offer.
- (ii) Define clearly your overall incubation program. Start simply based on resources you have, improve later, however make efforts to improve as quick as possible.

## 5 OUTCOMES AND RESULTS

### 5.1 OUTCOMES AND IMPACTS ACHIEVED

96. The incubator measures the result of its own work with one simple metric: increase of incubatees' sales volume.

97. Creation of jobs is not considered a reliable parameter by the incubator management since it varies a lot with the type of business. For example, handicraft and shoes jobs will increase with sale volume; however jobs in essential oil and fresh vegetable might not increase with sales.

98. The incubator has helped to startup an accumulated number of 77 new businesses, of which 27 are still under incubation and 38 have graduated, and 12 withdrawn. Over time the following table indicates the number of resident incubators, non-resident, graduates, and withdrawn.

|           | No. of Incubatees - Resident | No. of Incubatees - Non Resident | Total No. of Incubatees | New incubatees | Incubatee from Previous years | Graduates | Withdrawn from Incubator |
|-----------|------------------------------|----------------------------------|-------------------------|----------------|-------------------------------|-----------|--------------------------|
| 1995-2000 | 5                            | 15                               | 20                      | 20             | -                             | 10        | 2                        |
| 2000-2005 | 7                            | 20                               | 27                      | 19             | 8                             | 13        | 5                        |
| 2005-2010 | 5                            | 22                               | 27                      | 18             | 9                             | 15        | 3                        |
| 2010-2011 | 2                            | 25                               | 27                      | 18             | 9                             | -         | 2                        |

99. For a sample of 29 enterprise for which it was possible to collect information, the performance in terms of sales is illustrated in the following table. Agroindustry and agribusiness enterprises perform quite well with an average sale growth of over 20% and compare favorably with the average growth of 18% over different sectors.

**Table 2 Total Sales of Sample of Incubatees between 2008 and 2009 (Rs. Million)**

| No. of Companies | Sector                       | 2008 Sales (Rs. Million) | 2009 Sales (Rs. Million) | 2010 Sales (Rs. Million) | Average Growth 2008-2010 (%) |
|------------------|------------------------------|--------------------------|--------------------------|--------------------------|------------------------------|
| 8                | Agribusiness                 | 2,265                    | 2,705                    | 3,185                    | 20%                          |
| 11               | Agroindustry                 | 18,145                   | 21,805                   | 26,315                   | 23%                          |
| 5                | Handicraft                   | 3,750                    | 4,290                    | 5,740                    | 27%                          |
| 3                | Leather and Textile Industry | 2,450                    | 2,860                    | 3,600                    | 23%                          |
| 2                | IT                           | 14,180                   | 15,200                   | 16,780                   | 9%                           |
| <b>29</b>        | <b>TOTAL</b>                 | <b>40,790</b>            | <b>46,860</b>            | <b>55,620</b>            | <b>18%</b>                   |

Note: The details of each firm in the sample are available in APPENDIX 6.

100. In terms of average size, agribusiness enterprises are relatively small with sales less than \$100,000 per year and IT and agroindustry are larger size.

**Table 3 Average Sales of Sample of Incubatees between 2008 and 2009 (US \$)**

| Sector                       | Average 2008 Sales (US\$) | Average 2009 Sales (US\$) | Average 2010 Sales (US\$) | Average Growth 2008-2010 (%) |
|------------------------------|---------------------------|---------------------------|---------------------------|------------------------------|
| Agribusiness                 | 31,458                    | 37,569                    | 44,236                    | 20%                          |
| Agroindustry                 | 183,283                   | 220,253                   | 265,808                   | 23%                          |
| Handicraft                   | 83,333                    | 95,333                    | 127,556                   | 27%                          |
| Leather and Textile Industry | 90,741                    | 105,926                   | 133,333                   | 23%                          |
| IT                           | 787,778                   | 844,444                   | 932,222                   | 9%                           |
| <b>TOTAL</b>                 | <b>1,176,593</b>          | <b>1,303,526</b>          | <b>1,503,155</b>          | <b>14%</b>                   |

Note: The details of each firm in the sample are available in APPENDIX 6.

101. The effect on farmers' income can be measured in some cases. One hypothesis is that by increasing the incubatees sale volume, the income of farmers also increases. For example, the vetiver farmers income increased from Rp 2500/kg to Rp 3000/kg over the past 3 years. The fresh vegetable farmers have learned the packaging so not all the packaging is done in the cooperative packaging house. Part of it is done by the farmers, thus they gain higher income. In the case of handicrafts using a fiber called *mendong*, farmers realize an income several times higher than the alternative paddy production.

### 5.1.1 Impacts of the Incubator on Policy and Society at Large

102. In addition to the direct impact on company's sales and farmers' income, there are other impacts of the incubator on policy and society at large.

103. The incubator was involved in the founding of the Innovation Center for Micro and SMEs a national body under the Office of the Coordinating Minister for Economics. Presently, the incubator is involved in drafting the president regulation on the incubator development.

104. The incubator experience had an impact on academic programs and curricula. The previous manager of the incubator (Professor Hadi K. Purwadaria) was appointed to initiate a freshmen course titled "Introduction to Entrepreneurship," partly in recognition of the fact that he had managed the incubator for a long time. He was the coordinator of the course for two years in 2006-2007, and then handed the course to other colleagues. In early 2011, three modules were developed and will be discussed for adoption: Technopreneurship for semester 4-6, Internship in Entrepreneurship for field practices of students in semester 7, and Entrepreneurship Topics for Final Project in semester 8.

105. Impact on incubator program development in Indonesia. Since 1997, the Directorate General for Higher Education has offered and funded the incubator program, and the senior management of IAA-IPB has been involved in developing, evaluating, and monitoring the program for all universities in Indonesia.

106. Impact on skills has been limited. The skills of staff involved in the companies supported by the incubator varies from low to high skills, but on average the skills of the staff are low to medium. A sample from the 5 case studies is presented in the following table:

| No. | Incubatees/ Graduates                              | Skill  | Full time/seasonal                           |
|-----|--|--|--|
| 1   | Tricoco, Bu Aprisusi                               | Mostly Low,<br>Marketing and engineer : high skill | Full time 2 shifts<br>Seasonal the 3rd shift |
| 2   | Pulus Wangi, Pak Ede Kadarusman                    | Distiller operators : Medium skill                 | Seasonal                                     |
| 3   | Handicraft, Pak Endang Kurniawan                   | Low to medium skill                                | Full time base on no of pieces done          |
| 4   | Pacet Segar Fresh vegetables, Pak Unang Badrutamam | Low skill,<br>Marketing medium skill               | Full time                                    |
| 5   | Hikmah Shoes, Pak Yana Supriyatna                  | Low to medium                                      | Full time                                    |

107. Impact on direct and indirect labor is difficult to ascertain. For the five case studies the impact is presented in the following table.

| No. | Incubatees/ Graduates                              | Direct Labor           | Indirect Labor                  |
|-----|--|------------------------|---------------------------------|
| 1   | Tricoco, Bu Aprisusi                               | 32 full time, 2 shifts | 35 seasonal for the third shift |
| 2   | Pulus Wangi, Pak Ede Kadarusman                    | 15 seasonal            | 100 vetifer farmers             |
| 3   | Handicraft, Pak Endang Kurniawan                   | 60 full time           | 160 <i>mendong</i> farmers      |
| 4   | Pacet Segar Fresh vegetables, Pak Unang Badrutamam | 12 full time           | 100 vegetable farmers           |
| 5   | Hikmah Shoes, Pak Yana Supriyatna                  | 40 full time           |                                 |



## 5.2 GOALS MOVING FORWARD

### 5.2.1 Post Graduate Affiliation

108. Graduates continue to be associated with the incubator even after graduation. They are expanding and they need the incubator services for new products, new technology, and new marketing systems. **The relation is also reciprocal.** The incubator needs graduates for investment and to show examples to startup incubatees.

109. The graduates have not yet formed any informal or formal business association to help themselves and fellow graduates. However, the incubator management is interested and thinking actively to promote this idea of forming an association of graduates.

110. In some cases, graduates have attempted to associate with each other through clusters, mergers, shared distribution channels or supply chains. The two vetiver incubatees have established a vetiver farmer association where one has the position of chairman and the other the position of vice-chairman. The association includes 5,000 farmers cultivating vetiver in Garut over 1,700 ha.

111. Closer relation with successful graduate should be continue and encouraged to ensure more visibility and a source of funds for the incubator.

### 5.2.2 Expansion of Focus

112. Even though the main focus of the incubator will remain agribusiness, the IAA-IPB will also incubate startup enterprises in the field of IT, textile, leather, and handicrafts. This is response to a request by the Bogor Municipal Government. Whether the expansion of focus will dilute the comparative advantage of the incubator or will strengthen it through the acquisition of new skills and synergies remains to be seen.

### 5.2.3 Management Issues

113. As 2011 starts, the incubator is well positioned. It has a history of 15 years of experience with an acquired reputation and visibility in Indonesia and increasing abroad. It has acquired a new building capable of hosting 14 tenants and has its own modern and new food processing equipment and plant. With adequate human resources, it could capitalize on the past achievements and experience and embark on a rapid growth of the number of incubatees. One critical factor seems to be the availability of full time human resources such as a CEO who is capable, committed, and motivated. Such a CEO will be employed full time and respond to the Board of the incubator. Apart from his basic salary, his incentives could come from participation in the success of the incubatees through various mechanisms such as profit sharing (already experienced in the past by the incubator) and equity sharing.

## 6 SUMMARY AND CONCLUSIONS

### 6.1 CRITICAL SUCCESS FACTORS

114. Four key critical factors of success could be drawn from the experience of the past 15 years of IAA-IPB's experience. First, utmost importance needs to be given to the incubatees, both during the selection process and during the incubation period in order to ensure that they grow and are successful. Their success is the success of the incubator itself. One to one interaction with the incubatees is necessary to understand their problems and special needs, and help them find a solution.

115. Second, ensure that the incubator has the resources necessary to carry out activities and support its own management and support staff over the long period. Over-investment in activities and staff, particularly at the beginning of the incubator program is not likely to be sustainable. The incubator has to prove itself with whatever limited resources it could master to obtain over a medium term period (at least 3 years).

116. Third, if additional resources are needed, then strategic partnerships and networking need to be established. In the case of IAA-IPB, access to infrastructure, facilities, and technical services was obtained through linkages with the university; access to credit for the incubatees through participation in nation-wide programs to support growth of SME; exposure to international experiences through training and participation in conferences sponsored by development partners and international networks; support from local government through collaborative linkages and networking with the municipality government; support from private sector through linkages with Chamber of Commerce and financial institutions.

117. Fourth, maintain relations with successful graduates. They will continue to need assistance from the incubator, and in turn they will be able to assist the incubator by providing a role model to new incubatees, and represent a source of income for the incubator itself through profit sharing or equity investment.

### 6.2 LESSONS LEARNED AND IMPLICATIONS FOR AGRIBUSINESS INCUBATORS

118. The major lesson learned from the experience of IAA-IPB is **to put the incubatees' success at the center stage**. All the effort of the management and staff of the incubator is warranted and justified if the startup enterprises become sustainable businesses that could mature from micro/small size to medium and even large size.

119. Even though there will be failures among the startup and some graduates will not be able to move much beyond the small size, **it would be enough for the success of the incubator to have a small number of highly successful startup becoming medium enterprises**.

120. In the case of agribusiness sector, the IAA-IPB has filled a gap that current programs of the government or academia were not fulfilling: the incubation stage support to firms that more than other sectors are subject to a number of risks arising not only from the market and finance, but also from climate and nature.

The final lesson is that the incubator should not stop its support of incubatees immediately after graduation. Post-graduation activities are important. A process of selection of successful graduates should be established and post-graduation incubation could also continue. That will have benefits not only for the graduates, but also for the incubator in terms of visibility and profitability.

## APPENDIX 1. MISSION PROGRAM – VISIT TO IAA-IPB

| Date  | Activities   | Incubator Staff  |
|---|--|--|
| <b>Sunday, 13 Feb</b><br>12.00  | Pick up at airport<br>Travel to Hotel Santika Bogor<br>Overall Briefing  | Hadi K. Purwadaria   |
| <b>Monday, 14 Feb</b><br>09.00<br>09.00 – 10.00<br>10.00 – 12.00<br>12.00 – 13.00<br>13.00 – 14.00<br>14.00 – 15.00<br>15.00 – 16.00<br>18.30 – 20.00 | Pick up at Hotel Santika<br>Travel to Institute for R & D (LPPM) IPB Darmaga<br>Meeting with Director LPPM IPB,<br>Incubator Management Team<br>Visit New Incubator Building<br>Lunch<br>Visit Food Incubatee (Success Story 1)<br>Inauguration new Incubator Facilities<br>Meeting Rector IPB<br>Travel from Darmaga to Hotel Santika<br>Dinner | Deva P. Almada, Asna Jauhari<br>Director LPPM<br>Deva P Almada, Asna Jauhari,<br>Hadi K Purwadaria<br>Aprisusi<br>Rector University<br>Incubator Staff |
| <b>Tuesday, 15 Feb</b><br>07.00<br>07.00 – 11.00<br>11.00 – 13.00<br>13.00 – 14.00<br>14.00 – 16.00<br>16.00 – 18.00                                  | Pick up at Hotel Santika<br>Travel to Garut<br>Visit Vetiver Essential Oil Incubatee (Success Story 2)<br>Lunch<br>Visit Vetiver Essential Oil Incubatee (Success Story 2)<br>Travel to Tasikmalaya<br>Stay overnight  | Hadi K Purwadaria, Deva P Almada<br>Ede Kadarusman<br>Abdullah Rasadi  |
| <b>Wednesday, 16 Feb</b><br>08.00 – 10.00<br>10.00 – 14.30<br>14.30 – 16.30<br>16.30 – 18.30  | Visit Agricultural based handicraft incubatee (Success Story 3)<br>Travel to Pacet, Cianjur<br>Lunch on the way<br>Visit Fresh Vegetable Incubatee (Success Story 4)<br>Travel to Hotel Santika Bogor  | Endang Kurniawan<br>Unang Badrutamam   |
| <b>Thursday, 17 Feb</b><br>08.00 – 10.00<br>10.00 – 12.00<br>12.00 – 13.00<br>13.00 – 16.00<br>15.00 – 16.00<br>16.00 – 18.00                         | Discussion Management Team<br>Visit Facility at Campus IPB Bogor<br>Meeting with Incubatees (Natural Honey, Design Graphics, Green Community NGO)<br>Lunch<br>Visit Baby Shoes Incubatee (Success Story 5)<br>Travel to Hotel Santika Bogor<br>Debriefing at Incubator Office in Bogor   | Incubator Staff<br>Ade Kamadibrata, Andri Dwi Sasono, Cepi Al Hakim<br>Yana Supriyatna / Susi<br>Hadi K Purwadaria, Deva P Almada                      |
| <b>Friday, 18 Feb</b><br>09.00 – 11.00<br>13.00   | Travel to Airport<br>Departure   | Deva P Almada  |

## APPENDIX 2. PERSONS MET

| Name                       | Organization              | Position                    | Contacts Telephone                  | Contact Email  |
|----------------------------|---------------------------|-----------------------------|-------------------------------------|--|
| Hadi K. Purwadaria         | IAA-IPB                   | Senior Advisor              | +62 812 957 9098                    | tpphp@indo.net.id  |
| Deva P. Almada             | IAA-IPB                   | Assistant Manager - Program | +62 812 835 6282                    | deva_inkubator@yahoo.com   |
| Asna Jauhari               | IAA-IPB                   | Assistant Manager Resources | +62 812 926 6335                    | asna.jauhari@yahoo.com   |
| Herry Suhardiyanto         | IPB                       | Rector                      | +62 811112213                       | rektor@ipb.ac.id   |
| Ronny Rachman Noor         | LPPM/IPB                  | Deputy Director             | +62 812 990 6662                    | Ronny_noor@yahoo.com   |
| Pramono D Fewidarto        | ERDC                      | Director                    | +62 811116853                       | pramdfew@yahoo.co.id   |
| Aprisusi                   | Tricoco                   | CEO                         | +62 812 818 5096                    | susitricoco@yahoo.co.id  |
| Ede Kadarusman / Ahmad Nur | Pulus Wangi               | CEO                         | +62 812 239 7892<br>+62 817 229 598 | <a href="mailto:javavetiver@ymail.com">javavetiver@ymail.com</a><br><a href="mailto:vetiver.house@gmail.com">vetiver.house@gmail.com</a> |
| Abdullah Rasadi            | Sinar Wangi               | CEO                         | +62 852 2253 7445                   | sinarwangi@yahoo.co.id   |
| Endang Kurniawan           | Chahyaty Kraft            | CEO                         | +62 813 2310 7257                   | cahyatycraft2011@yahoo.co.id   |
| Unang Badrutamam           | Pusaka Tani / Pacet Segar | CEO                         | +62 812 992 8765                    | hunangbadru@yahoo.co.id  |
| Yana Supriyatna            | Hikmah Shoes              | CEO                         | +62 818 109 445                     | hikmahshoes@gmail.com  |
| Ade Kamadibrata            | Madu Odeng                | CEO                         | +62 815 825 7894                    | -  |
| Andri Dwi Sasono           | Intramedia                | CEO                         | +62 813 1400 4755                   | adwisasono@gmail.com   |
| Cepi Al Hakim              | Green Comm.NGO            | CEO                         | +62 857 8232 729                    | alhakimc@yahoo.com   |

### **APPENDIX 3. FUND RAISING FOR THE IAA-IPB**

121. The original funding sources of the incubator where from two ministries:

- 1994 – 1996 : Ministry of Cooperatives and SMEs (MCSME)
- 1997 – 1999 : Ministry of National Education (MNE)

122. The conditions/requirements that the original funding sources imposed on the incubator focused on the number of recruited incubatees per year. MCSME imposed 25 per year and MNE 3 per year. The requirement of MCSME was not reasonable since the amount of the provided funding was only sufficient for 5 incubatees. The requirement of MNE was appropriate for the amount of the provided funding.

123. Since 2000, the incubator has been looking for funding from various sources: programs from the government related to SME development in general (non-incubator and incubator), private parties, fees from the financial institutions providing credit scheme to incubatees<sup>6</sup>, and return on investment in successful graduates.

124. In order to secure this funding, the incubator management has engaged in networking and other activities such as trying to be a national leading role model, lobbying the government officers, conducting business meeting periodically with financial institutions to secure credit scheme for the incubatees.

125. The IAA-IPB's experience in fund raising provides some lessons for other incubators. In the initial stages of activities, emerging incubators should develop a network and conduct business meetings periodically with financial institutions to promote their incubatees. Then, the incubator managers should try to lobby the government to sponsor and get access to specific programs for incubation of SME. Finally, the incubator should become a role model so that the incubator is recognized by all stakeholders and its growth and support is facilitated.

126. According to the management of the incubator, one should not expect too much from financial institutions. In our experiences, the management fee gained will be around 2 % of the amount of the credit, and it is of course already big enough to consider that the interest for the specific credit scheme only 6-7 %.

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<sup>6</sup> In IAA-IPB's experience, the management fee gained was around 2 % of the credit amount. This was already a large percentage of the total interest of 6-7% for the specific credit scheme.

## **APPENDIX 4. SELECTION AND GRADUATION OF INCUBATEES**

### **Selection of Incubatees**

127. The incubator selects incubatees among startups and 2-3 years experienced enterprises. Priority is given to university graduates (particularly IPB graduates); however the incubator also recruits exceptionally motivated candidates who are not higher education graduates.

128. Over the past three years, the incubator received between 20 and 30 applications/year and selected about 7-8 incubatees/year (including both resident and non-resident incubatees). There are no different classes of incubatees (about resident and non-resident). Each incubatee is treated on a one-to-one relationship.

129. Currently, the incubator handles an accumulation of 2 residents and 25 non-resident incubatees. The reason for the low number of residents was the plan of moving up to a new building. The plan was formulated in 2009 and the building has been recently inaugurated (in fact during the visit of the InfoDev mission in February 2011).

130. Recruitment procedure includes several steps as follows: 1. Application from candidates, 2. Filling up incubator questionnaire, 3. Writing short business plan, 4. Interview, Writing full business plan assisted by incubator staff. 5. Evaluation of the full business plan based on the five Cs (Credibility, Capacity, Capability, Condition, Collateral), 6. Site Visit for non-resident candidates, 7. Acceptance. Each step provides a filter of the candidates.

131. The five C's are criteria applied in the final selection of incubatees. During the early recruitment steps, not all the criteria might be satisfied; in this case the incubator's management exercises some flexibility. However all five criteria apply in the final stage of the recruitment.

132. The five C's include:

- **Credibility** from former experiences in business (former loan if any), market prospect of their products
- **Capacity** of production they plan
- **Capability** of knowledge, skill, and motivation
- **Condition** of resources they own
- **Collateral** in broad terms : asset they own for the business

133. Weeding out non-performers is taken to provide the limited spaces to progressive and successful incubatees. Incubatees are evaluated twice in their first year (at 6 months after their initiation in the incubator and at 12th month), and annually afterwards. Criteria for non-performing incubatees at the first six month : no production in three consecutive months, at the 12th month : no continuous production in the last three months, annually: no sale increase in a year. Reapply for weeding out non-performers on the first six month, second six month, and then every year.

134. The incubator is well aware that selection of incubatees determines the success of the program; thus great care and resources are devoted to this activity.

135. During the first ten years, at any time the incubator was serving an accumulation of around 10, increasing to 20 consisting of the first, second, third year incubatees, and graduates (because the incubator has post graduate program).

### **Motivation of Incubatees to Join IAA-IPB**

136. The main motivations of enterprises to join the incubator at Bogor are:

1. Access to credit
2. Access to technology
3. Access to office facilities
4. Access to infrastructure (plant facilities, labs)
5. More credibility with suppliers
6. Access to business development services (business plan, advisory services)
7. Access to training and capacity building (workshops, business meetings, etc.)

137. Incubatee who were residents of the incubator proved to be more successful on average than non-residents. Even though the incubator management made an effort to provide one-to-one advisory services and promote all incubatees equally, perhaps the presence on campus of the resident incubatees gave them more opportunities to access information, advise and visibility.

### **Graduation of Incubatees**

138. Since 2005, the IAA-IPB incubator has graduated about 30 enterprises. The graduation takes about 3-4 years and is based on increase of production and sale volume. Over the past 3 years, there have been 2-3 graduates per year. In addition to the increase in production and sale volume, another criteria for graduation is smooth payback of the loans they might have obtained. Income in the first year of operations varies greatly and similarly at the time of graduation; it is specific to the operations of each incubatees. The criteria for increase in production and sale volume is a minimum of 50%/year for startup enterprises and a minimum of 10%/year for enterprises with 2-3 year experience. The criteria of number of employees is not considered very relevant by the IAA-IPB management as some types of enterprises might be labor intensive and other more capital intensive.

139. Exports of graduates are few. Some incubatees have exported their products, mostly through exporters in Jakarta. Only two graduates have experience in direct exports.

140. One lesson about criteria for graduation: tough criteria will make the incubator performance look low but loose criteria may result in situation in which graduates will not be able to survive after leaving the incubator.



141. The incubator includes the successful graduates in further training, business meetings and credit schemes if they are still expanding their business to diversify products and new technology implementation.

### **Success and Failure of Graduates**

142. About 70% of the incubator's graduates are still in business 2 years after graduation. The most important factors that determine the business success or failures of graduate are:

- Motivation
- Persistency
- Availability of loan for extending the business
- Financial management

143. The lessons learned about how best to assure graduate success:

- Select highly motivated incubatees.
- Products with prospect market flourish fast, regardless the market target (low or high income people)
- Access to technology and financial institution is a must.
- Development of appropriate marketing and distribution strategy, specific for each product.

## **APPENDIX 5. BOARD AND STAFF**

The board comprises the Rector of IPB; the Mayor, BMG; the Chair of Bogor Chamber of Commerce; and the Secretary General of Indonesian Association of Retail Enterprises.

The board functions include

- setting up the policy of the incubator together with the Advisory Committee, Head of R&D Center for Entrepreneurship IPB, and the incubator manager
- support the development of incubator in the university plan and in the BMG plan
- provide expertise from senior practitioners
- provide link to incubatee candidates
- inform the product market trend
- establish networking with prospect buyers

### *Advisory Committee*

1. Head of Institute of Research and Development (LPPM), IPB: advice on the strategy plan of incubator from the university perspective, report to the Rector the incubator development
2. Head of Office of Trade and Industries, BMG advice on the strategy plan of incubator from the BMG perspective, report to the Mayor the incubator development
2. Deputy for Assessment of Entrepreneurship, Ministry of Cooperatives and SMEs advice the incubator about the central government policy, provide link to the government executive ministries
3. Director of Innovation Center for MSMEs (Micro, Small and Medium Enterprises) advice on the programs in line with the strategy of the institute so the incubator could gain most benefit

### **Bogor Staff**

|                              |   |                             |
|------------------------------|---|-----------------------------|
| Manager                      | : | Ir Muslich MS               |
| Assistance Manager/Program   | : | Ir Deva Primadia Almada MSi |
| Assistance Manager/Resources | : | Drs Asna Jauhari            |
| Senior Program Officer       | : | Prof Dr Hadi K Purwadaria   |

### **Job Description**

| Position                     | Job Description   |
|------------------------------|---|
| Manager                      | <ol style="list-style-type: none"> <li>1. Manage and responsible for the whole operation of the incubator.</li> <li>2. Networking with the resources institutions and the other incubators nationally and internationally.</li> <li>3. Set up strategy policies with the assistant managers internally, and with the Board &amp; Advisory Committee, and Head of R&amp;D for Entrepreneurship.</li> </ol> |
| Assistance Manager/Program   | <ol style="list-style-type: none"> <li>1. Design and run the consultancy pattern for each incubatee based on their own needs.</li> <li>2. Conduct recruitment for new incubatees.</li> <li>3. Marketing and promoting the incubator to the incubatee candidates and to prospective buyers.</li> </ol>   |
| Assistance Manager/Resources | <ol style="list-style-type: none"> <li>1. Develop proposal for funding sponsor.</li> </ol>  |

|                        |   |
|------------------------|---|
|                        | <p>2. Maintain the available resources and look for new ones to support the incubator operation.</p> <p>3. Manage the cash income and outcome flow.</p>                                   |
| Senior Program Officer | <p>1. Support the management based on the lessons learned from IAA-IPB.</p> <p>2. Initiate ideas to obtain funding and assist management in developing proposals for funding sponsor.</p> |

### **Personnel costs**

|                            |   |                       |
|----------------------------|---|-----------------------|
| Manager                    | : | Rp 4 000 000/manmonth |
| Assistance Manager/Program | : | Rp 2 000 000/manmonth |
| Assistance Manager/Finance | : | Rp 2 000 000/manmonth |

Salary of senior program officer is charged to the university and not directly to the incubator.

### **Remuneration system / motivation system**

Bonus one person month salary per person per year (this is a common pattern in Indonesian salary system as long as the person fully attend the job in the related year).

10 % out of annual net income will be distributed to the manager and assistant managers based on their respective performances.

### **Future need for personnel**

Assistant managers will be added accordingly to the increase of the number of incubatees and projects. In the assumptions for cash flow (Annex 3), the new assistant manager is added one person in the year 3 to 5, and another one in the year 6 to 10.

## APPENDIX 6. SALES OF INCUBATEES OVER 2008-2010

| No | Sector                       | Incubatee                                   | Sector-Product                                     | 2008 Sales (Rs. Million) | 2009 Sales (Rs. Million) | 2010 Sales (Rs. Million) | Average Growth 2008-2010 (%) |
|----|------------------------------|---|--|--------------------------|--------------------------|--------------------------|------------------------------|
| 1  | Agribusiness                 | Unang Badrutamam-Pusaka Tani                | Fresh vegetables packaging and processing          | 1,000                    | 1,200                    | 1,300                    | 15%                          |
| 2  | Agribusiness                 | Michael Winarno-MBrio                       | Ganoderma mushroom, and food analysis laboratory   | 500                      | 600                      | 750                      | 25%                          |
| 3  | Agribusiness                 | Triyatno                                    | Fresh mushroom                                     | 400                      | 480                      | 600                      | 25%                          |
| 4  | Agribusiness                 | Abdul Halim-Pusaka Karya                    | Fresh vegetables packaging and processing          | 100                      | 120                      | 150                      | 25%                          |
| 5  | Agribusiness                 | Miftahuddin                                 | Cut flower plantlet from tissue culture            | 80                       | 100                      | 125                      | 28%                          |
| 6  | Agribusiness                 | Muh.Aidil-Jamur Rizki                       | Fresh mushroom                                     | 90                       | 100                      | 120                      | 17%                          |
| 7  | Agribusiness                 | Lilis-Pusaka Tirta                          | Fresh vegetables packaging and processing          | 75                       | 80                       | 100                      | 17%                          |
| 8  | Agribusiness                 | Ai Syarifah- Shimeji Mushroom               | Fresh vegetables packaging and processing          | 20                       | 25                       | 40                       | 50%                          |
| 9  | Agroindustry                 | Aprisusi-Graha Agri Industri                | Nata de coco and jelly drink                       | 12,000                   | 15,000                   | 18,000                   | 25%                          |
| 10 | Agroindustry                 | Ede Kadarusman-Pulus Wangi                  | Vetiver essential oil                              | 2,550                    | 2,700                    | 3,600                    | 21%                          |
| 11 | Agroindustry                 | Abdullah Rasadi-Sinar Wangi                 | Vetiver essential oil                              | 1,000                    | 1,100                    | 1,250                    | 13%                          |
| 12 | Agroindustry                 | Mashudi-Citra Pangan Mandiri                | Nata de coco and jelly drink                       | 800                      | 1,000                    | 1,100                    | 19%                          |
| 13 | Agroindustry                 | Giar/Ika-Anofood Prima Nusantara            | Meat and Fish Products                             | 500                      | 550                      | 625                      | 13%                          |
| 14 | Agroindustry                 | Dewi Miftah-Priangan sari                   | Snack foods  | 450                      | 480                      | 600                      | 17%                          |
| 15 | Agroindustry                 | Ani Chalid – Brownies Bogor                 | Cakes and brownies                                 | 360                      | 400                      | 450                      | 13%                          |
| 16 | Agroindustry                 | Cahyo/Novi-Favourite                        | Taro and cassava chips                             | 180                      | 200                      | 240                      | 17%                          |
| 17 | Agroindustry                 | Ade Kamadibrata-Madu Odeng                  | Natural honey                                      | 150                      | 165                      | 200                      | 17%                          |
| 18 | Agroindustry                 | Mee mee-Cendol de keraton                   | Traditional dessert                                | 75                       | 120                      | 150                      | 50%                          |
| 19 | Agroindustry                 | Rudi Zaenudin-Berekah Asih                  | Snack foods  | 80                       | 90                       | 100                      | 13%                          |
| 20 | Handicraft                   | Endang Kurniawan-Chahyaty Craft             | Mendong mattresses and handicraft                  | 3,200                    | 3,600                    | 4,800                    | 25%                          |
| 21 | Handicraft                   | Hamzah-Hanjaya Hariqi                       | Lether jacket and handicraft                       | 350                      | 450                      | 650                      | 43%                          |
| 22 | Handicraft                   | Ani Purwowirawati-Rafylla's art and florist | Recycle material handicraft and artificial flowers | 100                      | 120                      | 150                      | 25%                          |
| 23 | Handicraft                   | Ubaedillah-Exotic pot                       | Wooden handicraft                                  | 50                       | 60                       | 80                       | 30%                          |
| 24 | Handicraft                   | Agung Sutrisno-Kayu Kurnia Agung            | Wooden waste educational toys                      | 50                       | 60                       | 60                       | 10%                          |
| 25 | Leather and Textile Industry | Yana Supriyatna-Hikmah Shoes                | Baby shoes industry                                | 1,400                    | 1,560                    | 1,800                    | 14%                          |
| 26 | Leather and Textile Industry | M Nasir – Elna Shoes                        | Shoes industry                                     | 800                      | 1,000                    | 1,400                    | 38%                          |
| 27 | Leather and Textile Industry | Yetti Tarwin-Camelia                        | Confection and bag industry                        | 250                      | 300                      | 400                      | 30%                          |
| 28 | IT                           | Muzakkir-Zoom Accelera                      | Computer assembling and software                   | 14,000                   | 15,000                   | 16,500                   | 9%                           |
| 29 | IT                           | Andri Dwi Sasono-Intramedia                 | Graphic design and digital printing                | 180                      | 200                      | 280                      | 28%                          |
|    |                              | <b>TOTAL (IDR million)</b>                  |  | <b>40,790</b>            | <b>46,860</b>            | <b>55,620</b>            | <b>18%</b>                   |
|    |                              | <b>AVERAGE (IDR million)</b>                |  | <b>1,407</b>             | <b>1,616</b>             | <b>1,918</b>             | <b>18%</b>                   |
|    |                              | <b>Average (US \$)</b>                      |  | <b>156,284</b>           | <b>179,540</b>           | <b>213,103</b>           | <b>18%</b>                   |
|    |                              | <b>Max (US \$)</b>                          |  | <b>1,555,556</b>         | <b>1,666,667</b>         | <b>2,000,000</b>         | <b>14%</b>                   |
|    |                              | <b>Min (UA \$)</b>                          |  | <b>2,222</b>             | <b>2,778</b>             | <b>4,444</b>             | <b>50%</b>                   |

## **APPENDIX 7. SUCCESS STORIES**

### **Introduction**

144. The 5 success stories below are representative of the variety of activities that IAA-IPB has been doing over the years. There are 3 stories directly related to agribusiness (nata de coco, essential oil, and fresh vegetables), 1 story related to handicraft (but with a strong linkage to farmer products), and 1 story unrelated to non agribusiness (the baby shoes story) that however shows the evolution of the IAA-IPB towards a more general concept of incubator (the Bogor TBI or Technology Business Incubator) which expands the traditional basis of agribusiness to include other SMEs in IT, leather, textile, and handicrafts.

## **Tricoco, Ms. Aprisusi, Nata de Coco**

146. Ms. Aprisusi, originally from Sumatra, has shown an extraordinary strength of character over the past 10 years: through persistency and business acumen and with the support of the IAA-IPB she has created a company from scratch that is rapidly moving towards mid size.

147. As a graduate of IPB from the Technology Industry Department she had learned about food processing. She decided to start a business with drinks based on nata de coco. The processing of this product is not difficult. The difficult (or at least not easy to imitate) part is the fermentation of the nata de coco which she in fact could master. With this idea, in 1999 she became an incubatee at IAA-IPB. She did not possess any assets, not even a motorcycle to move around. She was far from her native Sumatra and even her family did not approve her of embarking on a risk business (her parents were government employees). Through the IAA-IPB she got some seed money of Rp. 11.5 million (about \$1200) to buy a second hand pick up.



148. She decided to register her brand name (Tricoco) in 2003, but it took her up to 2007 to get the name registered (because of bureaucratic delays).

149. Currently she employs a staff of 32, of which 50% are women and working in 2 shifts. She gets her main raw material (coconut) from West Java through a Jakarta wholesaler. Other inputs such as sugar, plastic cups (different size, but mostly 2 sizes one for adults and one for

children), and carton boxes come all from Jakarta.

150. Interestingly, in order to assure that fermentation is done properly, she has two sites in her production, one site for fermentation and one site for processing. Most of the machinery is made in Indonesia, with the exception of some imported machinery (from Germany) to make automatic labeling for expiration date. So far, she did not have any serious problem with machinery. She has hired an engineer who is able to take care of maintenance and repair.



151. Her products come in different sizes, but mostly in two size: a cup for adult and a cup for children. The products could be consumed over 1 year (expiration date) from the time of production.

152. She initially started distribution with small retailers; later she used a distributor and now exports to Java, Sumatra, and Sulawesi. Indirectly she also exports to other countries by providing raw material to another company.

153. One might think that being a businesswoman has some disadvantages. However in the view of Ms. Susi there is a very important advantage of being a businesswoman in Indonesia and that is that supplier trust women more than men.

154. The incubator played an important role to help her at the beginning

when she was a nobody with no assets and no connections. The incubator facilitated her to get the seed money, to host her initial production on the facilities of the incubator, and introduce her to suppliers. To be a resident incubatee was very good because she could have a space to start her production (initially only 100 m<sup>2</sup>), and technology consultants who could advice her.

155. The incubator also took an equity interest in her business with a small percentage of her profit sharing. From an initially surface of 100 m<sup>2</sup>, she later moved to a location of 200 m<sup>2</sup> and later 250 m<sup>2</sup>. Currently she has invested in buying land around Bogor to expand her factory. She is also thinking to expand her business in new lines such a mineral water and solid jelly from sea weeds.

156. She would also like to open a small minimart that could be used to study which new products are good in the market. If good in the market then she will produce those products. She is also trying to explore linkages with supermarkets now.



157. The current sales are Rs 1.8 billion/month (about USD 200,000). This is a remarkable achievement for somebody who started in 1999 producing manually one cup of nata de coco at a time, then 2 cups (manually), then 1 mechanical line (of 8 cups) later shifting to 2, 4, and now 8 mechanical lines. She has already purchase the equipment which soon will be installed to expand her production lines from the current 8 to 16.

158. The most important help she obtained from the incubator:

- Initial trust behind her that provided her with a support and building of her confidence.
- Facilitated initial access to bank credit. Now every bank very happy to offer credit, but at the earlier stages nobody wanted to give her any money.

159. The incubator itself is very proud of this graduate and keeps close relation with her. One part of the profit of Tricoco are flowing back to the incubator. The incubator also introduces Aprisusi to new incubatees to show where they could arrive.

160. E-marketing which started in early 2011 had caused a lot of phone call requesting sample of Tricoco product. In fear of not be able to meet the additional consumer demand, Ms Aprisusi requested to be temporarily withdrawn from the e-market list of IAA-IPB, until the company increase again its production capacity.

## Pulus Wangi, Pak Ede Kadarusman, Vetiver Essential Oil

161. Mr. Ede is a farmer, currently heading a vetiver farmer cooperative in Garut, a hilly area of West Java famous for the cultivation of vetiver and vegetables. Mr. Ede is also the Chairman of the Vetiver Farmer Association including 5,000 farmers and cultivating 1,700 ha with vetiver. Together with his son who is a 29-year old graduate in Business Management he has developed a company that is selling about 5 million IDR/year or about 550 thousand USD.



162. The main use of vetiver in Garut is for essential oil. However, other uses include aromatherapy and Mr. Ede and his son have started to consider a number of applications such as handicrafts (like bags, frames, vases, pots), fertilizer, medicinal, and even vetiver-coffee! His main products are listed in the following table:

| Product                             | Remark   |
|-------------------------------------|--|
| Standard distilled vetiver          | 250 kg/month   |
| Premium distilled vetiver           | By order   |
| Vetiver plantlets                   | 14.000 plantlets/week                                      |
| Vetiver drinks                      | Vetiver coffee, Vetiver tea, vetiver bandrek (local drink) |
| Handicrafts for waste vetiver roots | Pot for plants, basket, photo frame, particle board.       |
| Vetiver by products                 | For spa and aromatherapy                                   |



163. Since 2009, when he joined the IAA-IPB, production has increased from 2000 kg/year to 3,000 kg/year of essential oil. This was possible partly through facilitated access to credit, partly through better linkages with buyers, and partly through efficiencies gained in the use of new distillation equipment.

164. His involvement with the IPB started in 2007 but he became an incubatee in 2009. The main contributions of the incubator to his business have been:

- Access to technology (designed by the incubator)
- Access to capital
- Facilitated marketing (direct selling to foreign buyers)

165. He has already obtained a Rs. 250 million loan at 6% interest through IAA-IPB and has almost finished to pay (only 2 months left) and want to apply for a new loan.

166. About 50% of his raw materials come from his own production and 50% from production of about 100 farmers organized as farmer groups.

167. Incentive for farmers to cultivate vetiver. Yield per ha is 10-14 tons/ha. Farmer benefit is 50% of value of production. On an hectare basis, the value of production is an average of



\$3700/ha. Thus, a farmer who owns one ha will have a net income \$1850/year, while a paddy farmer in comparison only get \$650/year for two time harvest.



168. Both Mr. Ede and his son attend vetiver training conducted by the association, private sectors, and universities. To promote the company, Mr. Ede and his son attend exhibitions such as Inacraft (2009, Jakarta), Dubai Global Village (2009, UEA), Jakarta International Expo (2010), Design Competition High Level Quality by Germany for essential oil (2010, West Java), SMEs Expo (2010, Jakarta). They are also active member of the Indonesian

Essential Oil Association, West Javanese Essential Distillery Association, Samarang Creative Community, and Association to improve SMEs, and of course, IPB Incubator.



169. The company has been awarded The Best Walkabout Project from Indonesian Telecommunication Co in 2006, Progressive SMEs from Garut District in 2008, The Best Design Competition High Level Quality by Lupafak Germany in 2010, and The Best Technopreneurship from Garut District in 2010.

170. Mr. Ede plans to expand production to 5,000 kg/year by 2014. This will be achieved through expansion of cultivated area, investment in new distilleries (now he has 3 distilleries but needs 2 more for a total of 5). Different from traditional essential oil producers, he does not use wood or charcoal as fuel for the distillation process. In fact he is using a combination of solar energy and energy from recycled lubricant oil rather than diesel on the basis of both economic cost and environmental considerations.

171. The market for vetiver is still big and there is a large gap to fill, not only for perfume but also for aromatherapy. Together with his son he is thinking to engage in new services such as eco-tourism and edu-tourism. Eco-tourism is targeted to people who want to observe the beautiful scenery of vetiver fields in cool mountainous areas, while having interactive discussion with the vetiver farmers and distillers. His company can also provide lodging for overnight staying. Edu-tourism is targeted to students and people who want to learn the history, cultivation system, distillation, and handicraft processing.



172. In order to expand, the company will have make considerable investment in accumulating stock of essential oil to ensure timely and regular delivery to the client and overcome fluctuations due to various climatic conditions. Moreover, new technologies both in production and processing will allow to obtain higher yield per ha and higher yield of oil per kg of vetiver.

173. While the key customers are currently the perfumery industry and the hotel and tourism industry (for spa, aromatherapy and ecotourism services), a potential customer could be the pharmaceutical industry (for some therapeutic property of vetiver) and the cosmetic industry.

174. The company is in the process of certifying its production as organic and engaging in a “zero-waste program” to support green and environmentally friendly production.

## Cahyaty Craft, Pak Endang Kurniawan, Handicrafts

175. Mr. Endang is an extremely dynamic man who started as a micro enterprise producing handicrafts and has been able to identify one line of products that is now producing in larger scale and selling to various regions of Indonesia and abroad. His company produces several handicrafts, but the main and most successful one consist of a portable mat made with a combination of a natural fiber (*mendong*) and synthetic.



176. The mats combine natural fiber (*mendong*) coming from village production organized by the company and artificial fibers. The company has its own designs and a designer among its staff. Mr. Endang engages about 160 farmers and procured about 40 tons/month.

177. Benefits of *mendong* to farmers can be obtained from following information. Cycle of production 3 years. Each year two harvest. First harvest 8.4 ton/ha. Second harvest 11.2 ton/ha. In one year about 20 ton/ha. Costs Rs 200 million/13 ha for 3 years. Revenue about Rs. 70 million/year/ha. That would represent more than \$7,200 benefit/year/ha considerable above what farmers could do with paddy or most other crop.



178. The work is broadly specializes by function and gender: women work on weaving with a traditional loom and men cut and stitch using a sewing machine.



179. Currently, the company exports directly to Brunei and Malaysia; it exports to Japan through export; and in the past it exported also to Germany. Current sales of mat only are about 8,000 pieces per month, each piece about Rs. 45,000 (in USD about \$40,000/month).

180. His encounter with the IAA-IPB dates back to 1996 when he attended his first training with the incubator and attended course in accounting, entrepreneurship, and motivation.

181. At the same time that he encountered the incubator, Mr. Endang started the mat business. Through the facilitation of IAA-IPB he obtained an initial small credit of Rs 37 million/year and kept on using and expanding the credit over time. For example, in 2004 he obtained Rs. 375 million /year. Given his success in business, he does not have problem with

access to credit: the banks are now keeping on offering him money to borrow. The money from bank is expensive (14.5% interest) however; as a result he prefers to get credit through the programs for which the incubator can facilitate access to credit at an interest rate of 6%. At present, he obtained Rs 250 million credit that he can pay back in three years by the IAA-IPB facilitation.

182. Recently, in early 2011, he attended training from the incubator in e-marketing but so far no new business has resulted through e-marketing.

183. The main reasons in the past for getting in touch with the incubator were:

1. Advice and networking to expand market
2. Facilitate access to low interest-rate credit

184. In addition to handicrafts Mr. Endang is running a small construction material shop; handicrafts however still represents 70% of his revenue.



185. He has ambitious plans over the next 5 years. He intends to build a factory where all the production units are under one roof. Currently, some production units are at the village level and some at in the city. He also wants to have a compound with services that could provide a tourist attraction (say agro- and industrial-tourism) where he could show the making of handicrafts, promote exchange between artisans and tourists. The third activity would be an educational tourism implying children from school to visit his premise and learn about how to make handicrafts. Mr. Endang has already bought the land to realize this three-pronged strategy (handicrafts-tourism-education).

186. His workers can get more than the minimum wage of Rs. 700,000/month. In fact a good worker in his factory can get Rs. 60,000/day.



## Pacet Segar Fresh Vegetables, Pak Unang Badrutamam

187. Mr. Unang is a vegetable farmer located in the hilly areas (1000 meters altitude) of Cianjur in West Java and provides a variety of fresh vegetables to Jakarta. Among his produce are fresh lettuce, cucumbers, tomatoes, onion, pak choy, carrot, baby green bean, celery, cherry tomatoes, and leafy vegetables.



188. His sales provide sufficient supplies for 10 outlets in Jakarta. Every days from the packhouse he ships 2 truck full of fresh vegetables, 2 times per day. Each trip takes 3 hours. Each truck



transports between 500kg to 1 ton, 7 days/week. Only 2 days per year he does not ship produce to Jakarta, during major religious holiday.



189. Only a small part of the produce he sells comes from his own land (2 ha); most of the produces is sources from 10 farmer groups representing a total of 100 farmers. All together they cultivate about 60 ha of vegetables.

190. Mr. Unang's first contact with the IAA-IPB was in 1996 but he became an incubatee only in 1999. He found the incubator useful to his business particularly in terms of training (eg packaging) and facilitated access to credit. In fact, the incubator facilitated him to obtain an initial credit of Rs. 35 million which later increased to Rs. 150 million in 1999. And another Rs 150 million in 2010.

191. The incubator also facilitated his participation in the training of 20 persons in Japan in the management of fresh vegetables. He spent 2 months for this training.

192. In 1996 he started contacts with supermarket (facilitated by the incubator) with deliveries of 2 trucks/day.



193. Supply to McDonald started in 2000 and lasted up to 2006. However it was later discontinued because of stricter policy requirements by McDonald. The fast food company required to move production to an industrial area and adherence to good manufacturing practices (GMP). He did not have difficulty with adherence to GMP, but the move to an industrial area would have represented an investment that he could not afford.

194. At about the same time, he became supplier for Wendy and is currently continuing to be a Wendy supplier. According to Mr. Unang Wendy is more flexible than McDonalds; moreover he can make 20% more profit, and benefit from a variable price in the contract (differently from McDonald which uses fixed prices).

195. In addition to his own small packinghouse, he uses the government cooperative building as packinghouse. Total volume of cooperative is on average 15-20 tons/day. Advantage of being part of a cooperative: negotiation with supermarket and higher negotiated price (20% higher). Each member of the coop supplies directly to the supermarket, but the price is negotiated collectively.



196. He is currently planning to build 2 screen/plastic house of 1,500 m<sup>2</sup> for a cost of Rs 35 million. He intends to avoid pesticides and wants to be a certified organic farmer and dealer of fresh vegetables, a plan that might be possible to implement in his area which is relatively high-altitude and less exposed to pests.

197. His company won a National Award for Agricultural SME innovation.

198. Another plan is to invest with a group of like-minded people in a retailing cooperative. That investment will require considerable investment but he believes that the expected benefits will be high.

199. His total sales in 2010 were 1.3 billion up from Rs. 700 million in 2006. His direct costs are about 20% of sales and his margins about 30%

200. He plans to increase the size of his business through the development of organic production and retailing.

201. He is currently writing new business plan, using GMP of McDonald, will need capital of Rs. 6-10 billion.

## Hikmah Baby Shoes, Pak Yana Supriyatna



202. Differently from the previous stories, Hikmah is not an agribusiness. The reason is mentioned here is to show how the approach of the IAA-IPB has been effective even for different types of businesses and promises well in terms of the current strategy of expanding the focus of the incubator.

203. The owner of Hikmah Baby Shoes, Mr. Yana Supriyatna, is currently a non resident incubate at the IAA-IPB.

204. The baby shoe business was started in 1998 by the father of Pak Yana and Pak Yana joined the company in 2000. Since he beginning Pak Yana effectively had to take over since his father got gravely ill and died. His first coming to the business was quite difficult. When he inherited the business from his father, his father has left a debt of Rs 300 million (money borrowed in order to get treatment for cancer). He had to sell the house and start again from scratch.

205. He went to the incubator in 2005 for training in management, marketing, and administration. In 2009, the incubator facilitated a credit of Rs. 100 million for 2 years at 7% interest.



206. Competition has increased since the early 2000 due to the inflow of cheap products from China. His company cannot compete on price with China, so need to compete on quality. All production is manual. The key stage where quality should be improved is in stitching.



207. E-marketing not yet successful in getting orders (just started though in 2011).

208. Why choosing IAA-IPB since it is outside of your field? Because:

- IPB cared
- IPB is concerned about SME development
- He got in touch with IPB through the Bank

209. Now he has full health insurance for his family and life insurance; health and education insurance for the children
210. Difficulty in finding skilled workers. It takes 3-6 months to train a new staff.



APPENDIX 8. LEAFLET OF ERDC AND INCUBATOR IAA-IPB

### Organization Structure

```

            graph TD
            HEAD[HEAD  
Secretary] --- CO[Coordinator of Networking Development]
            HEAD --- GAM[General Affair manager]
            HEAD --- FIN[Finance]
            HEAD --- ADM[Administration]
            HEAD --- PH[Public and Household]
            HEAD --- TECH[Technician]
            HEAD --- DBI[Division Business Incubator]
            HEAD --- DER[Division Entrepreneur Research]
            HEAD --- ED[Division Entrepreneur Development]
            DBI --- ICG[Internal Consulting Group]
            DER --- ECG[Expert Group / External Consulting]
            ED --- ICG
            ED --- ECG
            
```

|                                   |                               |
|-----------------------------------|-------------------------------|
| Head of Center                    | Ir. Pramono D. Fewidarto, MS. |
| Secretary                         | Ahmad Yani, STP., MSi.        |
| Business Incubator Division       |                               |
| Entrepreneur Research Division    |                               |
| Entrepreneur Development Division |                               |

ENTREPRENEURSHIP RESEARCH & DEVELOPMENT CENTER (ERDC)  
 RESEARCH & COMMUNITY SERVICES INSTITUTION (LPPM)  
 BOGOR AGRICULTURAL UNIVERSITY

**BUSINESS INCUBATOR**  
*"Solution to Growing and Developing SMEs"*

INSTITUT PERTANIAN BOGOR

**IPB Vision 2008-2012**  
 "To become a leading research-based university in Asia with the major competence in tropical agriculture, possessing entrepreneurial characteristic harmonious principles"

**Entrepreneurship Research and Development Center (ERDC) LPPM IPB**

IPB Baranangsiang Campus  
 Jl. Raya Pajajaran Bogor  
 Phone. 0251-8311268/8323415  
 Fax: 0251-8311268  
 Email: erdcipb@yahoo.com  
 www.p3k.ipb.ac.id



### Mission

To serve and aid the development of small-scale enterprises to become resilient, and independent enterprises and to be able to develop them into middle-scale ones through assistance

### Aims

1. To create entrepreneurship environment in the campus
2. To generate independent small and middle scale entrepreneurs after the incubation period
3. To improve the effectiveness and efficiency of business by improving technological content
4. To establish a cooperation network among tenants with producers, financial institutions, markets as well as technology and information resources in order to strengthen business opportunities

### Services

1. Consultation on technology, business management, marketing, facilitation for capital sources (credit proposal)
2. Access to office facilities (rooms for meetings, computers, telephones), pilot plant, repair shop, information resources, etc.
3. Production rooms for small and middle scale enterprises (SMSE) with low rental prices (if available/limited)

### Tenant Incubators

1. Alumni of IPB from various education levels for in-wall tenants, and both IPB and non IPB alumni for out-wall tenants
2. Possessing both strong motivation and characters as entrepreneurs
3. Owning business plans with excellent prospects

### Procedures for Tenant Selection

1. Writing an application letter to be a Tenant (FI-01/FO-01)
2. Filling in Business Profile form and identifying the kinds of needs and assistance
3. Submitting copies of personal identity (ID Card), business legality (if available)
4. Possessing business plan
5. Joining Administration selection
6. Joining selection on Entrepreneurship Characteristics, Business Prospects and paying a visit to the business location.
7. Signing the tenant agreement letter

### Development Plan 2010-2012

1. The number of In-wall Tenant reaches 30 Fresh Graduate per year (1incubation year) and 5 for Intensive Tenant (2 incubation years)
2. Tenant's business activities include Agro -industry: Manufacture (50 - 70%); Non Agro-industry: Manufacture (10-15%); agricultural cultivation (10-15%); other services (10-15%)
3. The number of Outwall Tenant reaches 30/year

### Business Priority (Program 2010-2012)

1. Business supporting and supported by environmentally friendly production technology (Green Business)
2. The utilization of innovative technology which is able to improve competitive power (quality, productivity, business product efficiency, as well as cooperation between inventors and tenants)
3. Considerably large and excellent business prospects in the long run
4. Business have networking with the community (farmers, fishermen, and household business)

### Flowchart for Tenant Selection

```

graph TD
    A[Registration] --> B[Administration Selection]
    B --> C{Passed?}
    C -- No --> D[Complement Registration Document]
    D --> B
    C -- Yes --> E[Interview]
    E --> F{Passed?}
    F -- No --> G[Stop]
    G --> H[Another Training Program]
    F -- Yes --> I[Location Observation]
    I --> J{Passed?}
    J -- No --> G
    J -- Yes --> K[Entrepreneurship characteristic Selection and business prospect SC : credibility, capacity, capability, condition & collateral]
    K --> L{Passed?}
    L -- No --> G
    L -- Yes --> M[Tenant Agreement Letter]
    M --> N[Development and incubation Inwall : 1-2 years Outwall : 2-4 years]
    N --> O[Handling Post Assistance and Incubation]
    P[Assistance] --> N
    Q[Facilities] --> N
    R[Advocate limited] --> N
    
```

### Profile of Successful Tenant

| No | Tenant Name                          | Business Name           | Business Type                          |
|----|--------------------------------------|-------------------------|--|
| 1  | H. Mastur Fuad/ Unang Badrutamam, SP | Pacet Segar             | Packaging and Fresh Vegetables Trading |
| 2  | Prof. FG. Winarno                    | MBrio                   | Genoderma mushrooms                    |
| 3  | Aprisusi, STP                        | CV. Graha Agri Industri | Nata de coco & jelly drinks            |
| 4  | Ade                                  | Madu Odeng              | Pure honey                             |
| 5  | Muzakir, STP                         | CV. Zoom Accelera       | Hardware & software computer           |
| 6  | Cahyo, SP                            | Favorit                 | Taro and banana chips                  |

## EXPERIENCES

1. Mentoring various business tenants in agribusinesses, food process, handicraft, IT and tissue culture
2. Entrepreneurship training for Banks and BUMN clients
3. Development of Business and Technology Incubator Model for universities
4. Agribusiness Terminal Design for horticulture, flowers, livestock and livestock products
5. Development of corn and bullfrog cultivation

## WORKING PARTNERS

1. Executive institutions : Ministry of Cooperatives and SMEs, Ministry of Agriculture, Higher Education Department, and Ministry of Industry
2. Financial resources : BRI, Mandiri, BUKOPIN, Modal Ventura, BUMN
3. Marketing partners : Retailer Association, Chamber of Commerce
4. International organizations : UNDP, APEC, SPICA, BIC (Business Innovation Center-Europe), InWent-Germany



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Email: erdcipb@yahoo.com  
Website: p3k.ipb.ac.id



## BACKGROUND

Since it was founded in 1963, Bogor Agricultural University (IPB) has been participating in many national development programs to increase the farmers, income and to develop the cooperatives and SMEs through its various units under the coordination of Research and Community Development Institute (LPPM). On August, 1994 IPB established the Incubator Center for Agribusiness and Agroindustry IPB (PIAA-IPB) and started its operation in 1995. The founding of PIAA marked a new era in providing services for SMEs in an integrated program for three years incubation periode in terms to serve and grow the SMEs by graduating good entrepreneurs who grow to self-sufficient SMEs in the field of agribusiness and agroindustries.

Based on SK Rektor No.061/K13/OT/2005 date 02 June 2005 IAA-IPB was developed into Entrepreneurship Research and Development Center (ERDC)-IPB by joining the Garuda 21 Program which is concerned in entrepreneurship training. ERDC is located at IPB Baranangsiang Campus, and has been incubating SME clients, both inwall and outwall, covering West Java area for the outwall clients and also maintained post-incubation with them, while keeping consultancy with outwall clients. ERDC has three division which are Entrepreneurship Development Division, Entrepreneurship Research Division, and Incubator Business Division.

## VISION

To foster the empowerment and independence of SMSE societies in order to make people's economy as the foundation of a well-built national economy.

## MISSIONS

1. Helping and growing the development of SMEs by incubation
2. Providing services to SME community for access of technology, management, marketing, and finance
3. Creating the entrepreneurship soul for the community and stakeholders by entrepreneurship training
4. Transforming SME into the strong and self sufficient ones growing to the medium entrepreneurs, even for the young or old entrepreneurs.

## ORGANIZATION STRUCTURE



|                              |                                       |
|------------------------------|---------------------------------------|
| Head of Center               | Ir. Pramono D. Fewidarto, MS.         |
| Secretary                    | Ahmad Yani, STP., MSI.                |
| Business Incubator           | : Ir. Muslich, MSI.                   |
| Entrepreneurship Research    | : Ir. Sutara Hendrakusumaatmaja, MSc. |
| Entrepreneurship Development | : Dr.Ir. Memen Surahman, MSc.         |

## BUSINESS INCUBATOR

1. Providing consultancies in technology, marketing, management, and development of credit proposal and business plan
2. Providing the limited space for production plant (inwall tenant) with low rent
3. Providing access to various shared office facilities (meeting room, computer, telephone), workshop, information etc.

## ENTREPRENEURSHIP RESEARCH

Entrepreneurship research in region, university and stakeholders in line of problems of entrepreneurship development

## ENTREPRENEURSHIP DEVELOPMENT

1. Design effective entrepreneurship training system
2. Implement entrepreneurship training in large scale, cooperated with multi stakeholders
3. Monitoring and evaluation for the result of entrepreneurship training
4. Searching prospective new potentially trades/business



