

Anas M. Fauzi
Vice Rector for Research and Collaboration

DISSEMINATION OF INNOVATION

Case of Bogor Agricultural University



Conference on
“Lost in Translation”
Britisch Council – MRHE – UGM
Yogyakarta, March 4th, 2015



Bogor Agricultural University (IPB), Indonesia
www.ipb.ac.id

FACULTY

1. AGRICULTURE
2. VETERINARY MEDICINE
3. FISHERY & MARINE SCIENCES
4. ANIMAL SCIENCES
5. FORESTRY
6. AGRIC. ENG. & TECHNOLOGY
7. MATH & NATURAL SCIENCES
8. ECONOMY & MANAGEMENT
9. HUMAN ECOLOGY

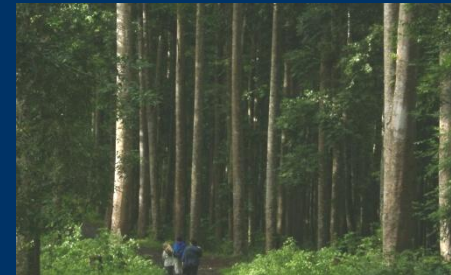
**GRADUATE SCHOOL
BUSINESS SCHOOL
VOCATIONAL STUDIES**



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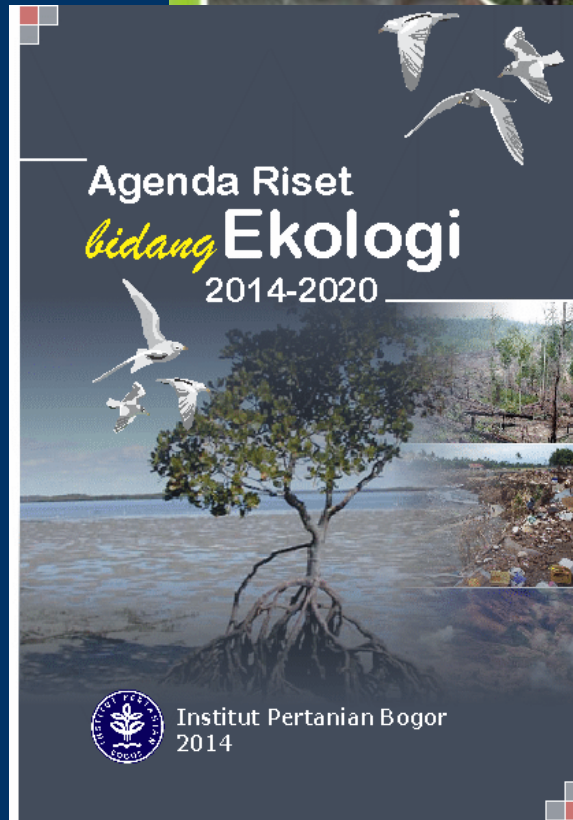
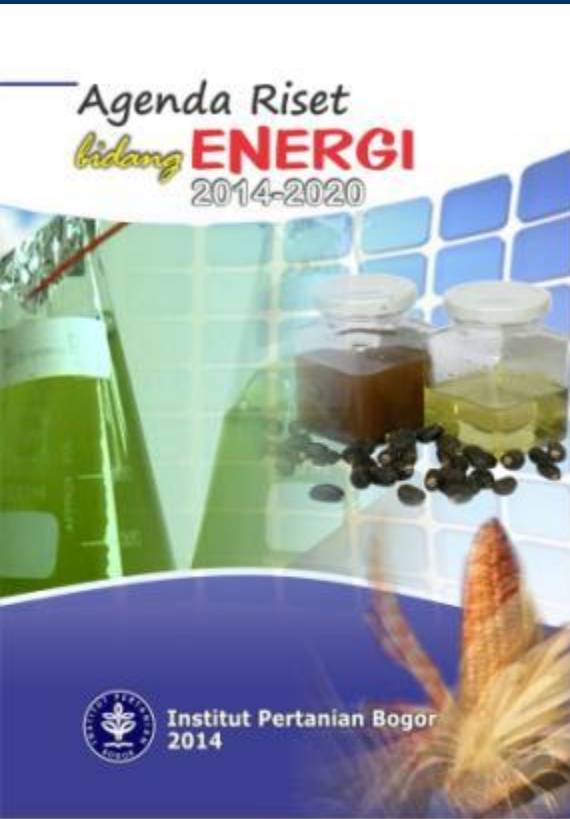
RESEARCH AGENDA

- FOOD
- ENERGY
- POVERTY REDUCTION
- ECOLOGY & ENVIRONMENT
- BIOMEDICINES



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Research Agenda



Consortium for Collaborative Research

New Academic Research Cluster "THE INDONESIAN BIOCLUSTER"

NEW ACADEMIC RESEARCH CLUSTER (NARC)

NARC

An integrated area where researchers, engineers and industries conduct research, technology development and innovation, information exchange, mutual cooperation and manufacturing of bioresources-based products to strengthen the industrialization toward sustainably economic growth, poverty alleviation, national prosperity and equity

CRC 990

Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems in Sumatra, Indonesia (EFForTS)



GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN



Bogor Agricultural University



University of Jambi



Tadulako University (FTS)

REDD+ - The Forest Grab of All Times?



UNIVERSITY OF
COPENHAGEN



Supported by: MINISTRY OF FOREIGN AFFAIRS OF DENMARK

DANIDA

INTERNATIONAL
DEVELOPMENT COOPERATION

Enhancing Marine Biodiversity Research in Indonesia (EMBRIO) *Definition of Research Clusters (DRAFT)*

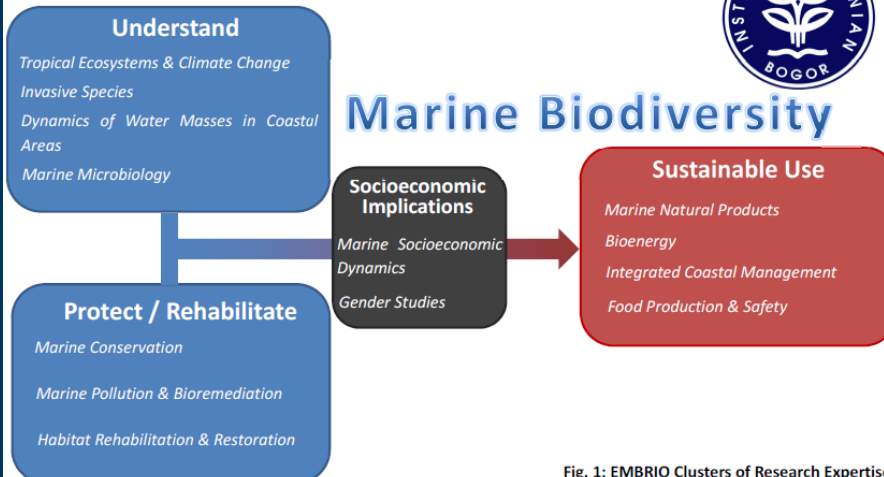
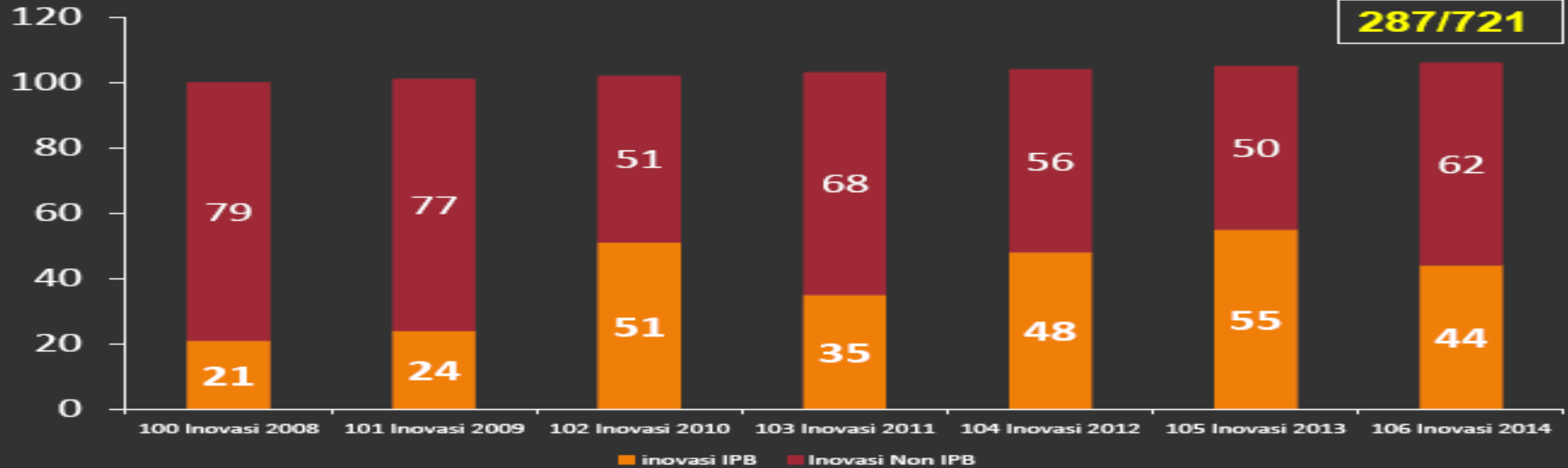


Fig. 1: EMBRIO Clusters of Research Expertise



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CONTRIBUTION OF IPB IN THE LIST OF PROSPECTIVE INNOVATIONS IN INDONESIA (BIC, 2008 – 2014)



IPR	Status	2010	2011	2012	2013	2014
Patent	Registered	160	179	200	199	203
	<i>Granted</i>	25	33	47	61	69
Merk	Registered	3	3	0	7	9
	<i>Granted</i>	1	1	4	4	4
Copy right	Registered	-	4	4	4	6
	<i>Granted</i>	-	4	4	4	4



Innovation

Food & Rural Dev.

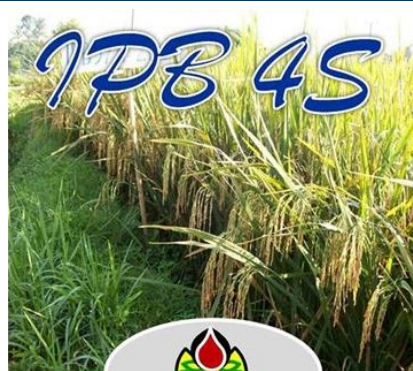
CALLINA (IPB9)



Departemen Agronomi & Hortikultura IPB
Jl. Meranti Kampus IPB Darmaga Bogor 16680
www.istanabenh.com

Kebutuhan benih
30 kg/ha
Umur panen
112 hari
Tekstur nasi
Pulen

Potensi produksi
11.2 ton/ha GKG
Ketahanan penyakit
Tahan terhadap tungro, hawar
daun dan blas



Departemen Agronomi & Hortikultura IPB
Jl. Meranti Kampus IPB Darmaga Bogor 16680
www.istanabenh.com

Kebutuhan benih
30 kg/ha
Umur panen
112 hari
Tekstur nasi
Pulen

Potensi produksi
10.5 ton/ha GKG
Ketahanan penyakit
Tahan terhadap tungro, hawar
daun dan blas



Sugiyanta et al. (2012)

Sutjiprihati (2011) Aswidinnoor et al. (2012)

Trikoesoemaningtyas (2012)



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Innovation | Food & Rural Dev.



Name of Lines	Protein Content (%)
IPB Kresna -12	33.91
IPB Kresna- 15	40.14
IPB Kresna -17	38.53
Cikuray	35.00
Malika	37.00

Koesumaningtyas (2014)



**SATURATED SOIL METHOD IN
SOYBEAN CULTIVATION ON
TIDAL LAND**

Ghulamahdi et al. (2012),

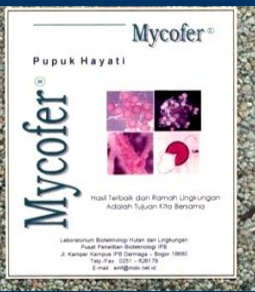


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ANALOG RICE (Rice-like grain)

Composition	Analog Rice	Rice
Water content	10.58	14.39
Protein	7.83	8.40
Fat	1,13	0,22
Ash	0,61	0.23
Carbohydrate	79.85	91,10





Application of Mycofer

Nikel mining rehabilitation

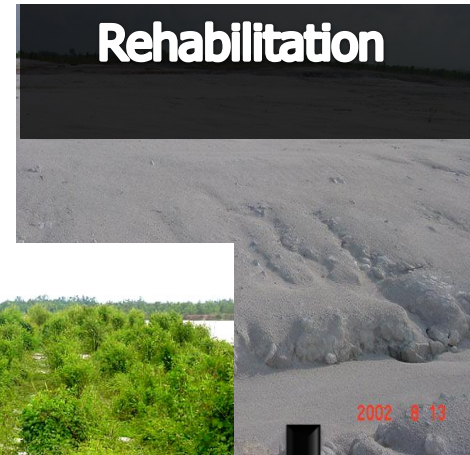


- Enhance plant growth
- Improve quality and productivity
- improve seedling adaptation
- Reduce P input



Coal Mining Rehabilitation

Rehabilitation



Translation Regulations

National

- UU 18/2002 → National system for R&D and implementation of S&T
- UU 14/2001 → Paten
- PP 20/2005 → IP and technology transfer from univeristy and R&D institution
- PP No. 66/2013 → Statuta IPB

University (IPB)

- Rector decree No. 136/K13/PG/2004 → IP arrangement guideline
- Rector decree No. 209/K13/PG/2004 → IP management guideline
- Rector decree No. 180/K13/PG/2005 → IP management guideline for graduate research



IPB rector decree No. 209/K13/PG/2004

IP and patent ownership

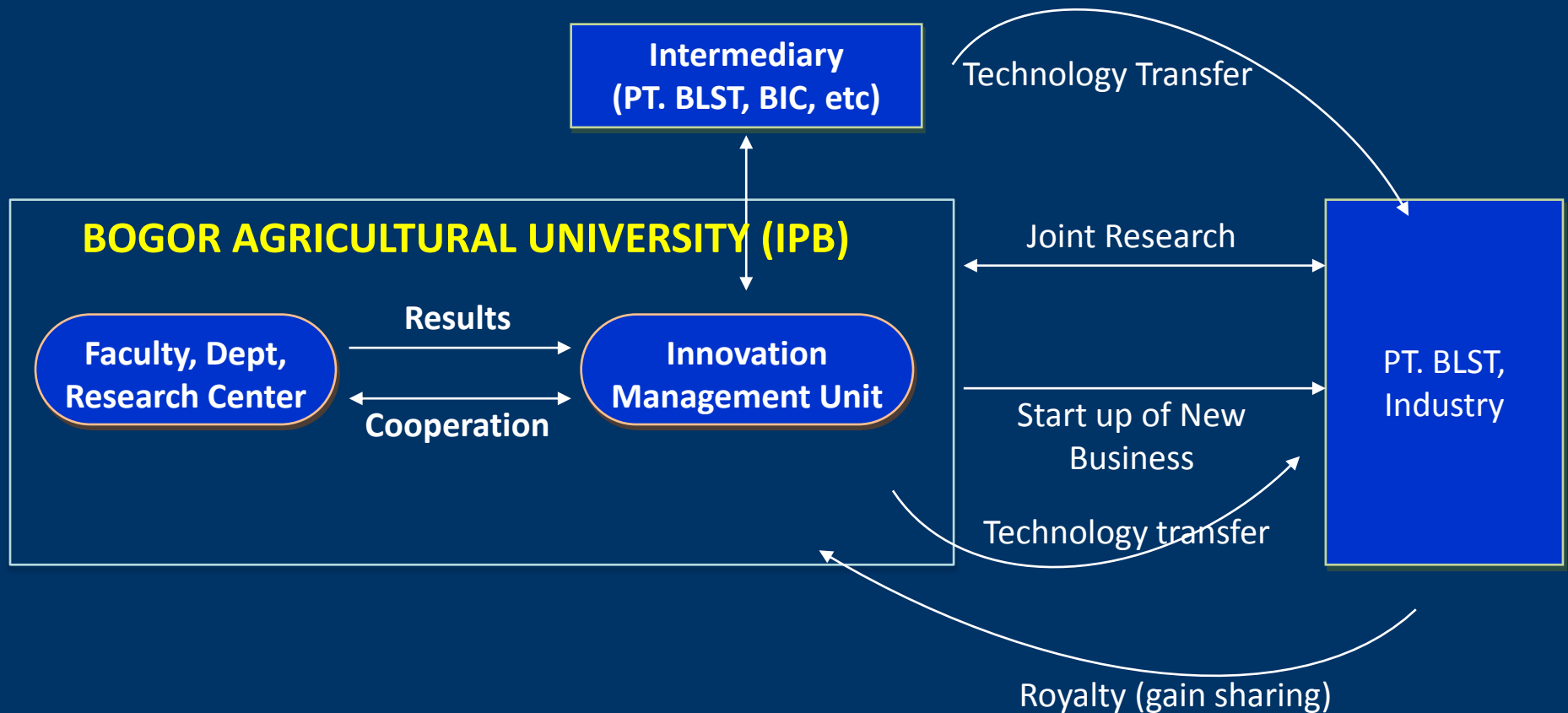
- IPs and patents resulted from IPB-funded research work belong to IPB.
- IPs and patents resulted from research in IPB facilities belong to IPB as long as no specific agreement with the third party

Gain sharing (Royalty based)

- Inventor : 40%
- Office (lab/dept/research center) : 20 % → research funding, lab facility maintenance
- IPB : 40 % → IP management, academic/research supports



DISSEMINATION SYSTEM OF INNOVATIONS IN IPB



- **PT Wahana Karya Inovasi (IFA Group) – mediated by BIC**
- **Technology license since 2014**
- **Prof. Hany Wijaya (Biopharmaca Research Center, Dept.of Food Science and Technology**

Cajuputs[®] Candy

Ingin coba cara baru menikmati manfaat minyak kayu putih?



Prof. Dr. Ir. C. Hanny Wijaya

bersama tim melalui penelitian penelitian sejak 1999 telah mengembangkan minyak kayu putih menjadi produk pengembangan olahan pangan, menggunakan minyak alam dari rasa bau, nikmat, dan memiliki manfaat yang lebih banyak untuk tubuh.



Cajuputs Candy dibuat dari bahan-bahan alami yang terdiri :
Gula pasir, Gula putih, Cajuput Oil, Nipentolite dan lain-lain.

Penelitian yang telah dilakukan : Produk kami :

1. PATEN DECORATION, Tahun 2009
2. INOVASIS : 105 RIL, 45 MINERSTER, Tahun 2011
3. ADK : Organisasi Kebudayaan Internasional Luar Biasa, Tahun 2012

Informasi Lebih Lanjut

Keperawatan Ilmu dan Teknologi Pangan
Fakultas Teknologi Pertanian
Jalan Ciliwung RT 0/1 No. 10
Ciliwung, Jakarta Barat
Email : hanny@stpp.ac.id
Telp : 021-74153000
Fax : 021-8147173

Website : www.stpp.ac.id
Gedung : 301
Kampus : 3
Jalan : 3
Kode : 16173

Produk ini dapat didistribusikan ke





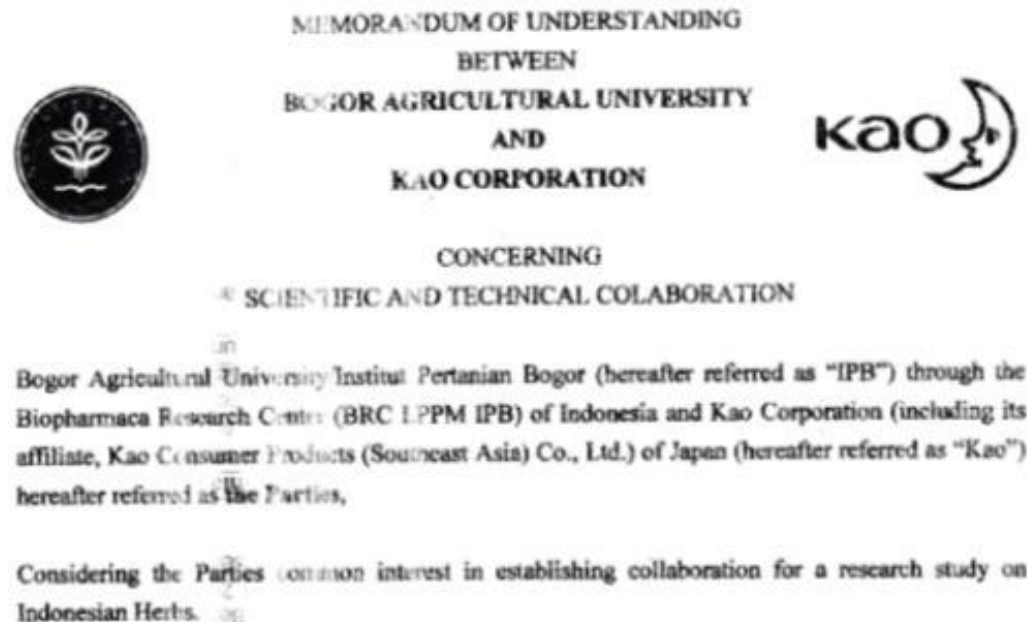



Biopharmaca Products

KAO Corporation - Japan with Biopharmaca Research Center (started in Agustus 2014)

Scientific and Technical Cooperation for commercial research

Benefits : 1) Research funding, 2) Capacity building for researchers, 3) International patent registration, 4) Technology transfer



Palm oil based surfactant (*Metil Ester Sulfonat*) for Enhanced Oil Recovery (EOR)

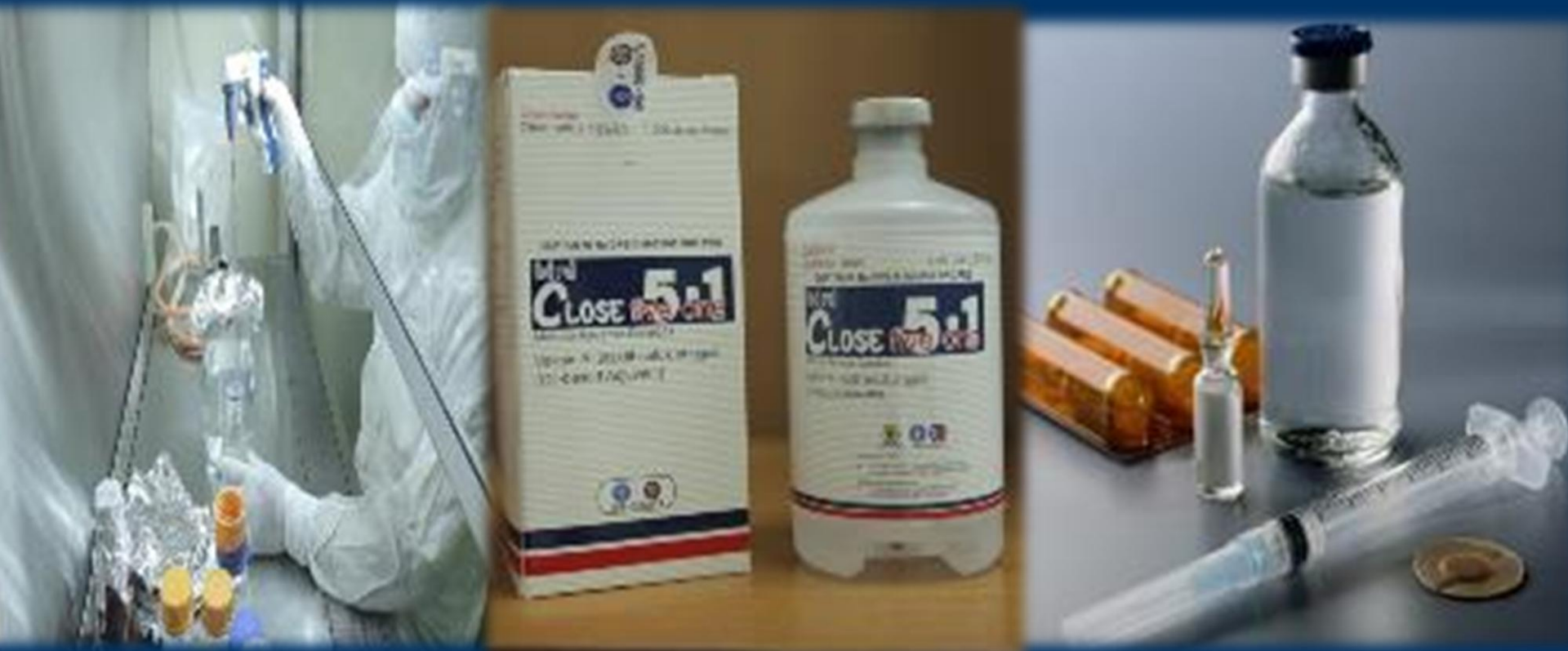
- **PT Mahkota Indonesia**, since 2011 for surfactant production (5 ton/day)
- Surfactant and Bioenergy Research Center (SBRC) IPB
- Contract Agreement with **PT Pertamina EP** (USD 1.11 Mio) in 2012 for the production of 110 ton surfaktan MES.



Vaccine Production

PT. IPB Shigeta and PT. BLST IPB for Bird flu vaccine
(Bird Close 5.1)

PT. Bio Farma and Primate Research Center IPB for
Vaccine Polio



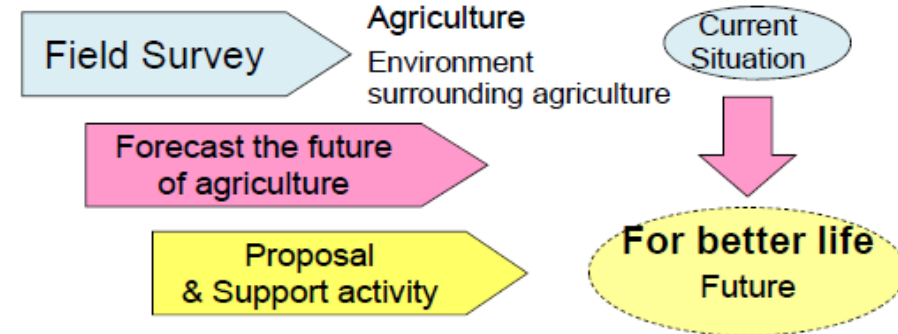
Yanmar Agricultural Research Institute-IPB (YARI-IPB)

《Purpose》

(1) Forecast the future of agriculture

from field survey of agriculture and its social environment, and

Propose the solution for better life of those who are relating to food production.



(2) Propose Solution widely for products and software to become an mandatory company for Farmers, Agricultural villages Regions and Countries.



Department of
Mechanical and Biosystem
Engineering - IPB

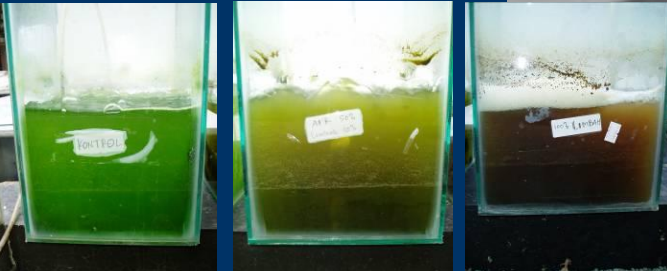


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IPB – RIST Posco Co. Korea



Mujizat (2013)



Cultivation day-7



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DISSEMINATION OF INNOVATION



IPB Innovation Gallery



Bogor Agricultural University (IPB), Indonesia
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Serambi Botani® (*Outlet for IPB's products*)

Bogor (Botani Square), Jakarta (Gandaria City, Mal Artha Gading, Kota Kasblanka), Serpong-Tangerang (Mal Alam Sutera), Palembang (Mal Palembang Icon), Surabaya (Mal Ciputra World)



- Outlet of all IPB's superior products both produced from research results (IPR base and non IPR) as well as small and medium business enterprise fostered by IPB
- Products: food, beverages, fruits, herbal & body care

ADOPTION FACTORS

Innovation Characteristic

- ❖ Relative advantage
- ❖ Compatibility
- ❖ Complexity
- ❖ Trialability
- ❖ Observability

VS

Company Strategy

- Proactive
- Active
- Reactive
- Passive



DISEMINATION STRATEGY

- ❖ Extension Programs
- ❖ Exhibition & Business meeting
- ❖ Forum ABG-C
- ❖ Direct marketing
- ❖ Joint research & production
- ❖ Spin off Company



WAYS FORWARDS.....

Nowadays apart from *teaching, research* and *community empowerment*, economic development has become also an additional important pillar.

World Patent Information xxx (2013) 1–10



Contents lists available at ScienceDirect

World Patent Information

journal homepage: www.elsevier.com/locate/worpatin

An entrepreneurial, research-based university model focused on intellectual property management for economic development in emerging economies: The case of Bogor Agricultural University, Indonesia

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^b Bogor Agricultural University (Institut Pertanian Bogor, IPB), Bogor, Indonesia



Bogor Agricultural University (IPB), Indonesia
www.ipb.ac.id

dari dan untuk IPB

<http://blst.co.id>

BLST

PT Bogor Life Science and Technology

Holding Company of IPB

Established since October 5th, 2003



IPB Science Park Taman Kencana

- ❖ Research Centers
- ❖ Innovation Gallery
- ❖ Multi-tenant building
- ❖ Green house

2014 - 2018



Science Park Taman Kencana



BLST
Holding Company of IPB



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www.ipb.ac.id



TERIMA KASIH
Thank You

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