

MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation



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I would like to thank the Government of Indonesia as well as Indonesian public institutions and civil society for their commitment to share their knowledge and expertise with other Member Countries. Indonesia is experiencing unprecedented economic progress and emerging as an economic and knowledge powerhouse not only in South East Asia but also globally. This is reflected in the effective development trajectory the country has embarked on, enabling it to withstand the volatility of the global economy.

The Islamic Development Bank believes that Indonesia's wealth of knowledge and expertise will help other Member Countries achieve their development goals. In line with its mandate, the Bank will, therefore, spare no effort to link other Member Countries with Indonesia in the interest of greater knowledge exchange, cooperation and trade.

Dr. Bandar M.H. Hajjar
President, Islamic Development Bank



As an emerging Middle-Income Country, Indonesia has much to share with other countries in the region, and beyond, as well as opportunities to learn. Indonesia aims to support the common welfare of fellow Southern Partners, including member countries of the IsDB, which outcome also to the people of Indonesia.

The extent of Indonesia’s international development cooperation is not limited to only South-South and Triangular Cooperation, but others international development, such as G20, GPEDC etc. All of these channels are geared toward strengthening development policy that goes “Beyond Aid”.

Through this shifting paradigm, Indonesia utilizes sharing of knowledge that can be adopted as solutions for development challenges, particularly among Southern Partners. Knowledge Sharing is expected to promote and strengthen the result of sustainable development through sharing expertise of validated development experiences and concrete lessons learned in practice.

Prof. Dr. Bambang P.S. Brodjonegoro
Minister of National Development Planning/
Head of National Development Planning Agency (BAPPENAS)

Indonesia is committed to further strengthen development cooperation and facilitate South-South and Triangular Cooperation (SSTC) initiatives in the form of Knowledge Sharing. This is in line with the National Medium-Term Development Plan (RPJMN) 2015–2019. The effectiveness of SSTC modality lies on the traits, that Southern countries share similarities of development levels; similarities of environment, climate and socio-cultural; geographical proximity; as well as common issues during their developing stages. These similarities allow easier transfer of resources and knowledge.

Selected Indonesia Resource Centers have been the flagship institutions to represent the expertise of Indonesia, in accordance with the development priority area. We are assured that the Indonesia Resource Centers can share development knowledges and experiences with other IsDB member countries. Thus, the implementation of the Reverse Linkage, with RCs as the implementing agencies, can provide mutual benefits.

Ir. Slamet Soedarsono, MPP, QIA, CRMP, CGAP
Deputy for Political Affairs, Law, Defense, and Security
Ministry of National Development Planning/
National Development Planning Agency (BAPPENAS)



Abbreviations

ACIAR	:	Australian Centre for International Agricultural Research
ADB	:	Asian Development Bank
AGAL	:	Australian Government Analytical Laboratories
AHEC	:	Alternate Hydro Energy Center
AIT	:	Asian Institute of Technology
APCCT	:	Asia and Pacific Centre for Transfer of Technology
APRACA	:	Asia-Pacific Rural and Agricultural Credit Association
AUSAID	:	Australian Agency for International Development
BAPPENAS	:	Badan Perencanaan Pembangunan Nasional <i>(National Development Planning Agency)</i>
BBIA-Bogor	:	Balai Besar Industri Agro <i>(Centre for Agro-Based Industry, CABI)</i>
BBIB-Singosari	:	Singosari Balai Besar Inseminasi Buatan Singosari <i>(Singosari National Artificial Insemination Center, SNAIC)</i>
BPBAP- Situbondo	:	Balai Perikanan Budidaya Air Payau <i>(Center for Brackishwater Aquaculture, CBA)</i>
BBPBAP-Jepara	:	Balai Besar Perikanan Budidaya Air Payau <i>(Main Center for Brackishwater Aquaculture, MCBA)</i>
BBPBAT-Sukabumi	:	Balai Besar Pengembangan Budidaya Air Tawar <i>(Freshwater Fisheries Aquaculture Main Center, FFAMC)</i>
BBPP-Malang	:	Balai Besar Pelatihan Peternakan <i>(National Animal Husbandry Training Center, NAHTC)</i>
BPPBAT-Bogor	:	Balai Penelitian dan Pengembangan Budidaya Air Tawar <i>(Institute for Freshwater Aquaculture Research and Development, IFARD)</i>
BBPPBL-Bali	:	Balai Besar Penelitian dan Pengembangan Budidaya Laut <i>(Institute for Mariculture Research and Development, IMRAD)</i>
BBPI-Semarang	:	Balai Besar Penangkapan Ikan, Semarang <i>(National Center of Development for Fishing, NCDF)</i>
BBPPEI-Jakarta	:	Balai Besar Pendidikan dan Pelatihan Ekspor Indonesia <i>(Indonesia Export Training Center, IETC)</i>
BPPSDMP	:	Badan Penyuluhan dan Pengembangan Sumberdaya Manusia Pertanian <i>(Agency for Agricultural Extension and Human Resource Development)</i>
BPOM	:	Badan Pengawas Obat dan Makanan <i>(National Agency for Drugs and Food Control, NADFC)</i>
BRI	:	Bank Rakyat Indonesia
BRI-IIM	:	BRI-International Institute for Microfinance
CIDA	:	Canadian International Development Agency
CV	:	Commanditaire Venootschap
CSUC-PTR	:	Canada-Sri Lanka Consortium for Post Tsunami Restoration
DCVMN	:	Developing Countries Vaccine Manufacturers Network

DGNED	:	Directorate General of National Exports Development
DIFRES	:	Danish Institute for Fisheries Research
FAO	:	Food and Agriculture Organization
FRLN	:	Forum Riset Life Science Nasional <i>(National Life Science Research Forum)</i>
GDP	:	Gross Domestic Product
ICHARM	:	International Centre for Water Hazard and Risk Management
IsDB	:	Islamic Development Bank
JICA	:	Japan International Cooperation Agency
KAN	:	Komite Akreditasi Nasional <i>(National Accreditation Committee)</i>
KHS	:	Karya Hidup Sentosa
KITECH	:	Korean Institute of Industrial Technology
KOICA	:	Korea International Cooperation Agency
LEMDIKLAT-POLRI	:	Lembaga Pendidikan dan Pelatihan Polisi Republik Indonesia <i>(Education and Training Institute – Indonesia National Police, ETI-INP)</i>
MC	:	Member Country
MFN	:	Microfinance Network
MMTC	:	Multi Media Training Center
MoU	:	Memorandum of Understanding
MPWH	:	Ministry of Public Works and Housing
NACA	:	Network of Aquaculture Centers in Asia Pacific
NAC	:	National Accreditation Committee
OECE	:	Overseas Economic Cooperation Fund
PULIN- BKKBN	:	Pusat Pelatihan dan Kerjasama International- Badan Kependudukan dan Keluarga Berencana Nasional <i>(Center of International Training and Collaboration- National Population and Family Planning Board, CITC-NPPFB)</i>
PP TTG-LIPI	:	Pusat Pengembangan Teknologi Tepat Guna - Lembaga Ilmu Pengetahuan Indonesia <i>(Development Center for Appropriate Technology-Indonesian Institute of Sciences, DCAT-IIS)</i>
PUSJATAN-Bandung	:	Pusat Penelitian dan Pengembangan Jalan dan Jembatan <i>(Institute for Road Engineering, IRE)</i>
RC	:	Resource Center
RL	:	Reverse Linkage
RIKILT	:	Institute of Food Safety Netherland
SMKN	:	Sekolah Menengah Kejuruan Negeri <i>(Public Secondary Vocational School, PSVS)</i>
SEAFDEC	:	Southeast Asian Fisheries Development Center
SSTC	:	South-South Triangular Cooperation
TCTP	:	Third Country Training Program
TDRMC	:	Tsunami and Disaster Mitigation Research Center
UNDP	:	United Nations Development Programme
UNFPA	:	United Nations Population Fund
WHO	:	World Health Organization



Foreword	3
Abbreviation	5
Contents	7
Summary of Resource Centers	8
Indonesia Brief	10
Brief on South-South and Triangular Cooperation	11
Profile of Resource Centers	
Agriculture	17
Marine and Fisheries	25
Health and Population	39
Pharmaceutical	45
Technical Vocational Education and Training	49
Planning and Budgeting	57
Microfinance	61
Transportation	65
Appropriate Technology	69
Industry	73
Trade	77
Disaster Risk Reduction and Mitigation	81
Bibliography	84
Appendices	86



Summary of Resource Centres

REVERSE LINKAGE. As part of its South-South technical cooperation modality for capacity development, the IsDB has developed and operationalised the Reverse Linkage (RL) program. RL is a technical cooperation mechanism whereby IsDB Member Countries (MCs) and Muslim communities in non-MCs, exchange their expertise, knowledge, technology and resources to develop their capacities and devise solutions for their autonomous development.

RESOURCE CENTRE. The RL program requires a pool of Resource Centres (RCs) to provide capacity development solutions to MCs. The RCs can be in the form of an institution or agency, with the ability, as well as structure, to provide effective and proven solutions. The RCs may be an independent institution, a department in a large institution, or a shared facility. It is also possible that a large organizations with multiple qualified institutions/ agencies, could be proposed as an RC. These RCs must be high performing centres with strong work ethics and has the culture and willingness to continuously acquire and strengthen its knowledge, especially in its areas of expertise. Organizations or agencies that qualify as RCs are those that have some measure of autonomy in the running of their programs budget management, and could provide its services and effective support to both local and international beneficiaries.

METHODS. RC Mapping employs a systematic process comprising three main steps: (i) Identification of RC Themes or Priority Areas, (ii) Selection of RC Long List, and (iii) Selection of RC Short List.

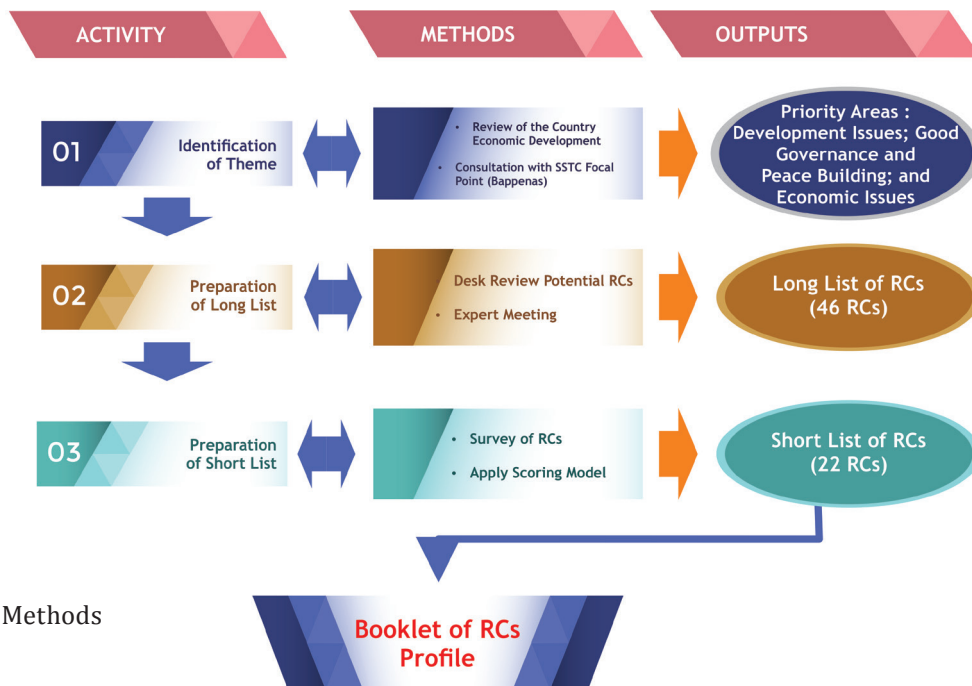


Figure 1: Methods

THEMES. The themes for RC mapping reflects Indonesia’s comparative advantage and development priorities. These priority areas fall under The South-South and Triangular Cooperation flagship program: (i) Development Issues, (ii) Good Governance and Peace Building; and (iii) Economic Issues.



Figure 2: Flagship and Priority Areas

RCs SELECTION CRITERIA. Below are mandatory requirements for an RC to be considered both in long list and short list. For the long list, the criteria are as follows:

1. Relevant to Indonesia’s South-South Cooperation (SSTC) priorities.
2. Adequate human resource (minimum 15 qualified staff).
3. Experience in international cooperation, particularly in activities under the auspice of SSTC.
4. The institution/agency must be established or in operation for at least 5 years.

For the short list; the criteria includes:

1. Relevance to the country’s Priority Areas.
2. Governance structure: The country’s structure of governance or organization and management must reflect support to the work of RC.
3. Capability: The Institution/RC must reflect its capability in terms of adequate human resource and infrastructure support.
4. Achievement: The Institution/RC must also demonstrate achievements in its areas of competence. This may include innovation and dissemination.

The Institution/RC must have experience in international cooperation. For the short list, the detailed criteria are as follows:

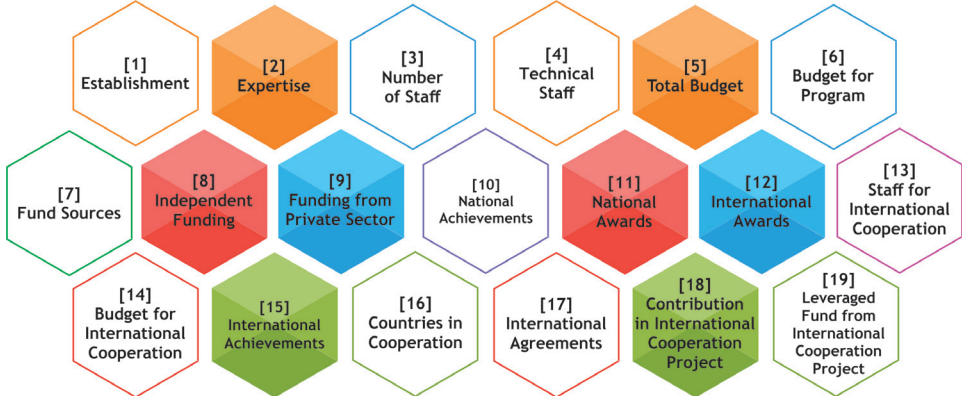


Figure 3: The Short List - Detailed Criteria

Brief on Indonesia

Indonesia is an archipelagic nation which comprises 17,000 islands within an area of more than 50,000 km, stretching from the most western part, Sabang, to the most eastern border, Merauke. Geographically, Indonesia lies near the intersection of shifting tectonic plates, which makes Indonesia prone to earthquakes and volcanic eruptions. As a matter of fact, Indonesia has the largest number of active volcanoes in the world.

In terms of population, Indonesia is among the world's most populous democracy. It is also a country with the largest Muslim population, reaching 88%. In 2016, Indonesia recorded a population of 257.9 million people. In terms of its economy, Indonesia has been growing steadily in the past decades, and has emerged as a middle-income country. In 2016, its income per capita was around USD 2,632, with an annual economic growth rate of about 5.02%.

The largest GDP contributor to Indonesia's economy is its industrial sector, and as of July 2016, it shows no sign of decline. The agricultural sector however, shows an opposite trend. Nevertheless, the agricultural sector has the biggest absorption of labour, followed by the industrial sector. This indicates that Indonesia is transitioning from an agriculture-based economy into an industry-based economy. Currently, Indonesia is trying to improve competitiveness through bureaucratic reform, especially by increasing technical competence and improving public service. These bureaucratic reforms have reflected positively on indicators such as corruption reduction, ease of doing business and the global competitiveness index.

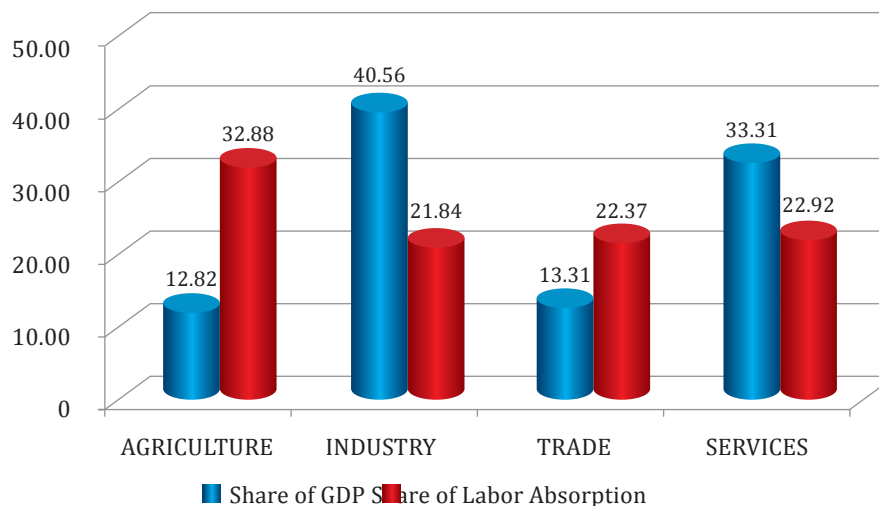


Figure 1: Indonesia's Economic Structure 2016

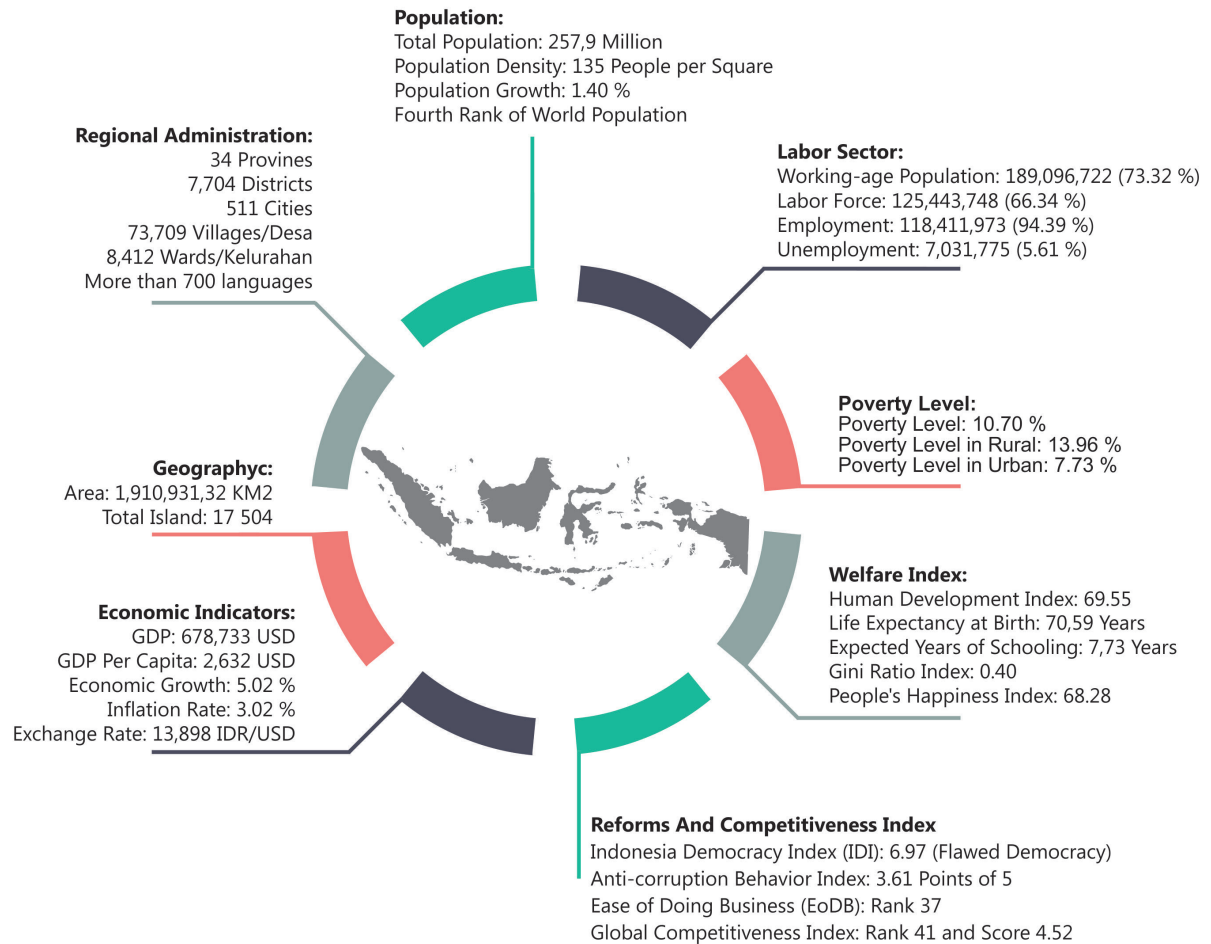
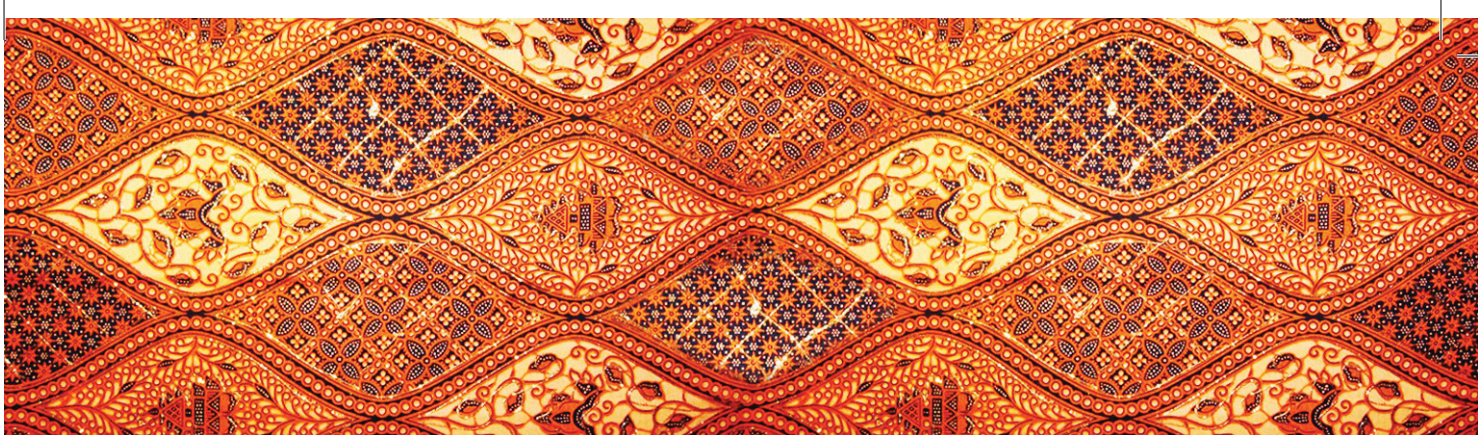


Figure 2: Indonesia's Profile 2016

Source : Statistic Agency of Indonesia, 2017; Ministry of Manpower, 2017 and Global Competitiveness Index, 2016–2017.

Brief on South-South and Triangular Cooperation

South-South and Triangular Cooperation (SSTC) is a cooperation between Indonesia and other developing countries through the mechanism of mutual learning, knowledge and experience-sharing, and transfer of appropriate technology to achieve mutual prosperity.

Indonesia's role and contribution to the SSTC could be traced back to the 1955 Asia-Africa Conference held in Bandung, Indonesia - a conference which united 25 Asian and African countries. Later, in 1961, the Non-Aligned Movement Conference became the incipient point under the development of the principles of solidarity and cooperation, which evolved to be the foundation of the South-South cooperation. The increasing role played by Indonesia in international development is reflected in the evolution of SSC.

Indonesia was one of the founding members of the South Commission. Established in 1987, Indonesia was represented by Prof. Dr. Widjojo Nitisastro (former Minister of National Development Planning/Head of National Development Planning Agency). In 2009, through the Jakarta Commitment, Indonesia's pledge itself to facilitate the SSC as a development partner, in institutional strengthening. A year later (2010), the Indonesia National Coordination Team for SSTC was established. In 2012, at the High Level Meeting Towards Country-Led Knowledge Hub, Indonesia declared its readiness as a Knowledge Hub in three key areas.

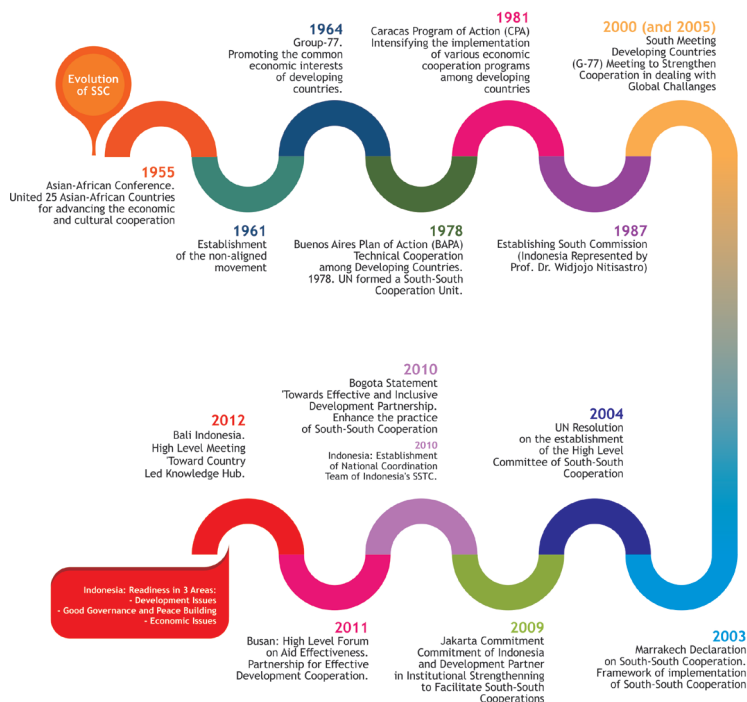


Figure 1: Evolution of SSTC
Source : Annual Report SSTC 2015

In recognition of Indonesia's position as a middle-income country, there is national realization for the need of the country to play a more active role in the arena of international development. This drive towards a more active role is indicated by the introduction of the Government of Indonesia's policy to strengthen the role of SSTC under the National Medium Term Development Plan 2015–2019.

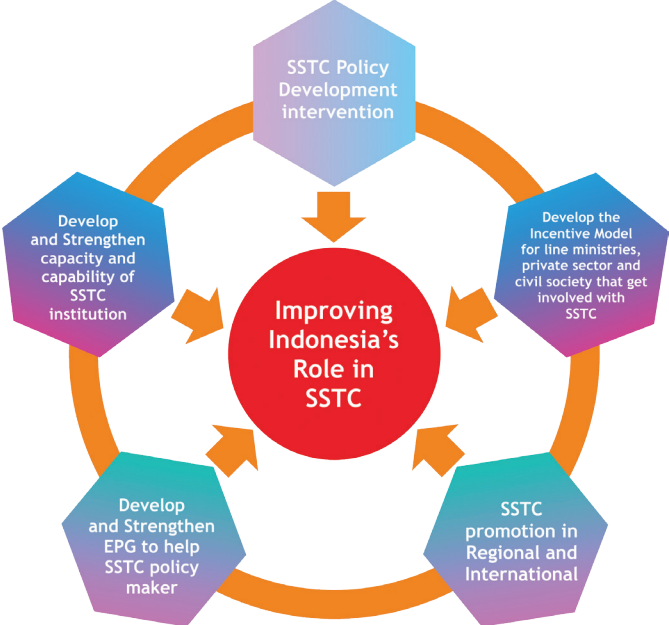


Figure 2: National policy of improving the role of Indonesia in SSTC

Numerous Indonesia's Southern partners, which are also developing countries, receives support from Indonesia through SSTC programs. Each year, the Government of Indonesia sets specific priorities in the implementation of SSTC programs and activities.

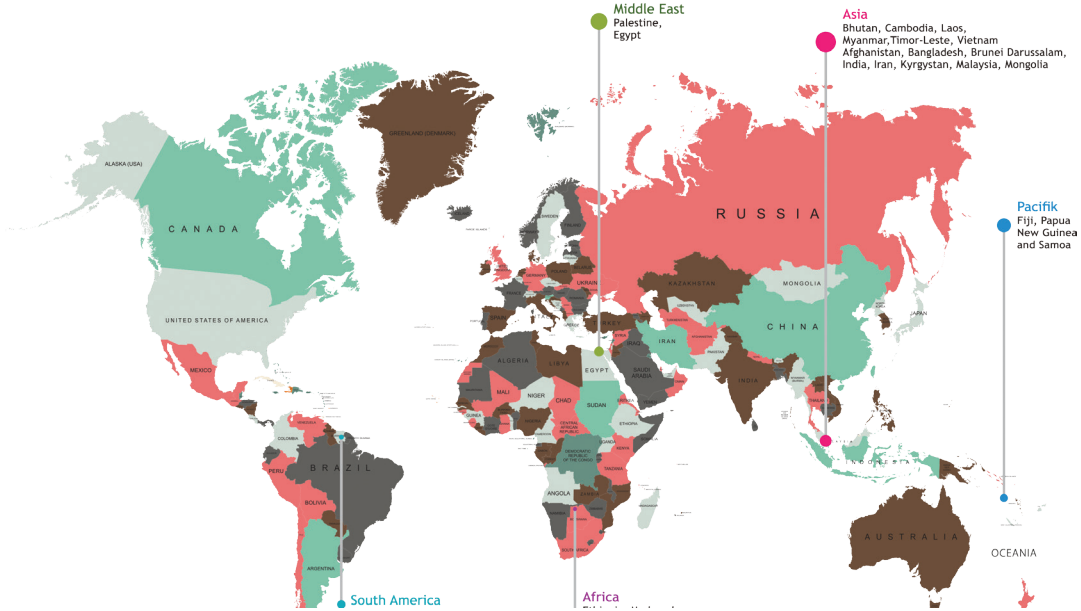


Figure 3: Map of Indonesia's Partner in SSTC
 Source : Annual Report SSTC 2015



Profile of Resource Centers

Batik Bogor,
West Java





Agriculture



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Solo,
Central Java

Balai Besar Inseminasi Buatan (BBIB) Singosari [Singosari National Artificial Insemination Center, SNAIC]. Malang



Introduction

The Singosari National Artificial Insemination Centre (SNAIC) was established in 2004, to response the increasing domestic demand for quality frozen semen. The centre was previously under the purview of the Technical Implementation Unit, from the Directorate General of Livestock and Veterinary Health of the Ministry of Agriculture. In 2010, the centre was elevated to the classification of a Public Service Agency. As a Public Service Agency, in addition to providing its services directly to the public, it also manages its own revenues it receives for services rendered.

The centre's main focus is to produce, distribute, and trade in quality livestock semen as well as perform artificial insemination services.

Currently, SNAIC has 134 staffs, including 57 technical staffs, 43 administrative staffs and 34 technical contractors. About 68% of its personnel are technical staffs.

The centre is chiefly funded by the government of Indonesia, with an annual budget of USD.3.7 million (in 2016). Thus far, it has successfully generated non-tax revenues from its services rendered to both domestic and international markets.



Main Activities

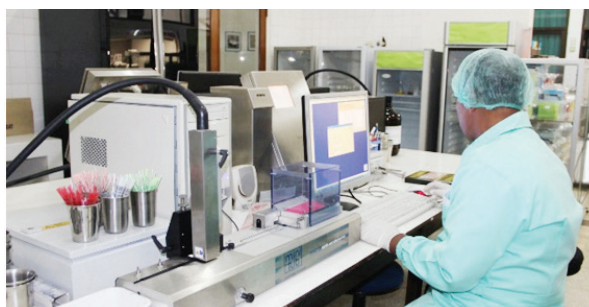
Since its establishment, SNAIC has encouraged productivity as well as increasing the genetic quality of livestock in Indonesia. SNAIC offers seven services, namely, production and marketing of frozen semen, semen quality testing, research, technical assistance, consulting services, provision of instructors and judges for livestock contests, and after sales services.

Areas of Expertise

The centre produces quality frozen semen, mainly to address the national demand as well as for export. SNAIC frozen semen products are exported to countries such as Malaysia, Cambodia, Myanmar, Pakistan, Kyrgyzstan and Timor Leste.

In terms of livestock artificial insemination, SNAIC has developed a technological breakthrough, that enables them to determine the desired sex of a specific livestock, with an average success rate of 75%.

SNAIC also has a certified laboratory (ISO 17025:200), which is the reference laboratory for semen production in Indonesia, particularly for semen quality testing and calibration. Hence, SNAIC plays an important role in determining the Indonesian National Standard for frozen semen. SNAIC could perform up to 1,366 semen quality tests per year; It also plans to increase the number of tests performed each year onwards.



Established : 1978
Staff : 134, including 57 Technical staff
Budget : USD.3.7 Million (2016)
Location : Malang, Indonesia
Geo Coordinate : -7.837353, 112.646288

Address : Desa Toyomarto, Kec. Singosari, Toyomarto, Singosari, Malang, Jawa Timur 65153, Indonesia
Phone : +62 341 458359, 458574, 454331
Fax : +62 341 458359
Web : www.bbibsingosari.com
Email : bbib.singosari@pertanian.go.id

SNAIC offers technical assistance to both domestic and international markets, with the objective for creating skilled labour. This will in turn create job opportunities in the rural areas. Annually, the centre provides 11 training courses, including inseminators for cows/bulls, inseminators for goats/sheep, livestock pregnancy examiners, technical reproduction assistants, frozen semen caretakers, livestock selectors, hay producers, supervisors and silage producers. Between the years 2012 and 2016, the centre has trained 3,932 participants, including 144 international participants.

SNAIC also provides consulting services in terms of providing solutions for the veterinary community, livestock businesses, and qualified integrated livestock businesses. SNAIC has five areas of competencies: (1) integrated livestock-based potential districts development, (2) livestock management consultancy, (3) reproduction technology consultancy, (4) ruminant technology consultancy, and (5) breeding consultancy.

Furthermore, SNAIC offers after sales services, as it believes that it is the best way to maintain and expand its business. The centre also conducts continuous monitoring, discussions, evaluation, and problem solving for their customers. Between the period of 2012-2016, SNAIC has conducted 275 after sale services.

Achievements

SNAIC has become a well-known producer and supplier of high-quality frozen semen, which are free from 12 communicable animal diseases, including mouth-and-nail disease. These products are certified by the Indonesian National Centre of Veterinary, and its production process is also ISO 9001:2008 certified and accredited by the Indonesian National Standard (SNI) since 2014.

In the international market, SNAIC's products are very competitively priced and is able to compete with Australian products. In East Java, calf produced as a result of SNAIC artificial insemination, prices values 3.5 times higher than calves produced by natural breeding.

The average annual production of frozen semen is around 2 million doses. Currently SNAIC produced 2,072,684 doses in 2015 and 1,897,228 doses in 2016.

SNAIC has received a number of awards, namely: [1] Winner of the Indo-livestock 2004 Expo and Forum and [2] Excellent Customer Service Award 2012. SNAIC was also an SNI Award nominee in 2012.

International Cooperation

With the vision of being a public service agency with international standards, SNAIC pays particular emphasis on international cooperation. From 2007 to 2012, the centre conducted an International Training Course with one of their international partners, the Japan International Cooperation Agency (JICA.) This course involved 20 countries, with 115 participants. In 2013, under the South-South and Triangular Cooperation (SSTC) framework, SNAIC was appointed to be the implementing agency for the capacity building activities and participated in several capacity building activities, which includes one with Timor Leste between 2014–2016.

SNAIC also participated in a project with COMCEC (the Standing Committee for Economic and Commercial and of the Organization of Islamic Cooperation). At the initial stage, the project aimed to export frozen semen to Afghanistan, Bangladesh, Kyrgyz Republic, Yemen and Brunei Darussalam. The allocated budget for this was USD 250,000 (USD 225,000 from the Development Bank of Turkey, and USD 25,000 from Indonesia).

Area of Expertise: Production and Distribution of Excellent Livestock Semen and Development of Artificial Insemination.

Strength and Achievements : Export products with international competitiveness, genetically superior and free of disease:

- 2 million doses of frozen semen produced per year;
- 1,366 tests of semen quality annually;
- 3932 persons were trained (2012-2016);
- 275 packages of after sales services (2012-2016).

International Cooperation Program : One of the more important programs is the IDB's Reverse Linkage project, first conducted in 2015 with Kyrgyz Republic as the recipient country. In this RL activity, a number of livestock industry professionals from Kyrgyzstan were sent to SNAIC for 12–28 days, to be trained in artificial insemination management, production and its handling process. In parallel, two SNAIC experts were sent to Kyrgyzstan for 60-90 days. Upon completion of the project, the centre is expected to export up to 12,000 doses of frozen semen to Kyrgyzstan.

Balai Besar Pelatihan Peternakan (BBPP) [National Animal Husbandry Training Center, NAHTC]. Malang



Introduction

The National Animal Husbandry Training Centre (NAHTC) was established in 1977, in Batu, Malang, East Java and awarded the status as an institution under the Ministry of Agriculture in 2007. Initially, it focused on trainings for animal husbandry. Now, the centre has evolved to include other services and operations such as livestock production, milk processing and consulting services.

The NAHTC is supported by 119 personnel, which includes 25 senior trainers and instructors who are experts in livestock technology, and other 26 functional staff. In 2016, NAHTC worked with a budget of USD.1.86 million. The centre is also ISO 9001: 2008 accredited, in recognition of its quality in management as well as provision of training services.

Main Activities

The NAHTC conducts trainings for government officials and livestock farmers. It also coaches and provides guidance to farmer-owned training

institutions such as “Training Centre of Agriculture for Independent Village”. The centre also offers consultation services to both NAHTC-trained and untrained livestock farmers.

Areas of Expertise

As a training institution for animal husbandry and livestock technology, NAHTC has 11 areas of expertise. Hence, the 11 recommended training programs at the NAHTC are as follows: post-harvest and milk processing; post-harvest and meat processing; butcher training (animal slaughtering); halal butchering; artificial insemination; maintenance of dairy cattle; cattle breeding; veterinary paramedics; veterinary medical officers; livestock waste processing and basic training for skilled agricultural advisors and experts.

The NAHTC employs 25 full-time senior trainers who are experts in livestock technology.



Established : 1977
Staff : 119 staff; 24 Senior Instructor & 26 functional staffs
Budget : USD. 1.86 million (2016)
Location : Batu, Malang, Indonesia
Geo Coordinate : -7.830105, 112.690185

Address : Jl. Singosari 24 Batu. PO Box 17, Batu 65301, Jawa Timur
Phone : +62 341 591302
Fax : +62 341 597032, 590288, 599796
Web : bbppbatu.bppsdp.pertanian.go.id
Email : ahtc_batu@pertanian.go.id

Achievements

The NAHTC has contributed significantly to human resource development in animal husbandry. As indicated by the number of government officials and livestock farmers trained by the NAHTC, it is evident that the demand for training programs in animal husbandry is high. For example, between 2011 and 2015, there were 8,562 government officials trained, including 5,176 agricultural staffs. In 2016, the NAHTC trained 1,245 government officials and 2,091 livestock farmers. Aside from training, NAHTC also provided internship opportunities. In 2016, the centre housed 439 interns.

The NAHTC also saw success in facilitating and fostering self-supporting farmer-training institutions. Between 2011-2016, as many as 129 institutions were successfully established.

Awards. Due to the success of the NAHTC as a productive training centre, it has received numerous recognition and awards from the government; such as the Adi Bakti Tani Award (2014) for the centre's success and commendable efforts in improving public services, and the Abdi Bakti Tani Award(2015) awarded by Minister of Agriculture for its success as a Public Service Working Unit with Excellent Achievement in Agriculture.

International Cooperation

The NAHTC has carried out international cooperation programs under the Agency for Agricultural Extension and Human Resource Development (BPPSDMP) at the Ministry of Agriculture. The NAHTC has actively carried out international cooperation programs since 2008 and has organized international training programs for ASEAN and African countries. Among the trainings are:

- Training on Integrated Farming System (IFS), in cooperation with COMCEC in 2015. The participants were from Egypt, Gambia, and Sudan;
- Dairy Cattle Livestock Training Program for Timor Leste was conducted from 26 June to 20 July 2013;
- ASEAN Training Course on "Added Value and Competitiveness on Goat's Milk Product", held from 20 October to 2 November 2013;
- Training on Post Harvest: Meat and Milk Processing, in cooperation with the Department of Veterinary Service and Animal Industry, Sabah, Malaysia; held from May to June 2016.



Area of Expertise : Training in Animal Husbandry.

Strength and Achievements : Training Program on Animal Husbandry and Milk Processing.

- 8,562 persons trained (2011–2015);
- 3,236 persons trained in 2016;
- 439 apprentices in 2016.

International Cooperation Program : Organizing international training for ASEAN and African countries.

Karya Hidup Sentosa(KHS), Yogyakarta



Introduction

CV Karya Hidup Sentosa (KHS) is an agricultural machinery manufacturer established in Yogyakarta in 1953. KHS has also established another machinery factory called PT. KUBOTA Indonesia (PT KI) in Semarang Central Java in 1973, which was a joint venture with a Japanese company, KUBOTA Corp.

KHS played an important role in the development of Indonesia's agriculture as its machinery was essential to the agricultural community. KHS produces 100,000 tractors annually, in which they export to some countries through SSTC.

KHS currently employs 3,500 workers spread across its various businesses. Its production capacity can be assessed based on its annual production of 100,000 tractors, not to mention various tractor parts and other farming equipments. To attest its manufacturing quality, KHS was also awarded the ISO 9001 : 2008 certificate, which denotes that its machinery are of international manufacturing standard.

Main Activities

KHS is mainly engaged in the production of agricultural machinery, equipment and spare parts. Although it has a wide range of agricultural machinery, it is widely known for its hand tractor, branded as "QUICK"- which is the brand KHS is often associated with. Other Quick brand products, diesel engines, electrical generators, and machinery spare parts. KHS is also a foundry for automotive components for Japanese vehicles manufacturers.

As part of its marketing program, KHS has a sales support unit called the QUICK Service Unit. This unit is responsible for fixing and replacing broken parts of its machinery and equipment.

Another part of its marketing program is to provide training to the farming community in the usage of machinery and equipment. These training programs are also available to farming communities abroad, especially to those in the Asia-Pacific and Africa. These training programs are conducted at the QUICK Training



Established : 1953
Staff : 3500 personnel
Budget : USD.70 Million
(approx. turnover)
Location : Yogyakarta, Indonesia
Geo Coordinate : -7.774550, 110.361274

Address : Jl. Magelang No.144, Karangwaru,
Tegalrejo, Yogyakarta 55241, Indonesia
Phone : +62 274 512095
Fax : +62 274 563523
Web : www.quick.co.id
Email : operator1@quick.co.id

Centre (QTC), which then provides the opportunity for farmer groups, tractor operators, extension and agricultural department officials to observe the process of manufacturing QUICK machinery and equipment using cutting-edge technology. Aside that, KHS also hosts factory visits and study tours, called Quick Study Tour or QUICK TUJUAN WISATA (QTW), for students and officials from various schools and institutions.

In terms of business development, KHS also undertakes research and development (R&D) to ensure sustainable innovation and development of new products.

Areas of Expertise

KHS' expertise lies in the manufacturing of agricultural machinery and equipment as well as machinery and equipment replacement parts. KHS' equipment and machinery are easy to operate and maintain as well as being suitable for all topographical conditions.

Achievements

KHS's agricultural equipment are high in demand. This is indicated by their ownership of 73% of the market share of hand tractors sold in Indonesia.

KHS is also actively involved with the local community. KHS has a welding workshop program open to those residing in the vicinity of their factory. This program is designed to empower the community to achieve a higher standard of living. Once the participants have graduated or qualified, they may gain employment with KHS in the production of hand tractor spare parts components.

In its bid to minimize environmental impact, KHS has installed an industrial waste treatment facility.

In terms of awards, in 2009, KHS received the Best Tax Care Award from the Directorate General of Taxes of Yogyakarta. KHS' owner and President Director was awarded the status of Pioneering Entrepreneur

in Industrial Development of Import Substitution in Indonesia by PERBANAS (National Banks Association).

In addition, KHS also received the "Satya Lencana Pembangunan" award, an honorary award from the President of Republic of Indonesia, for its contribution to the country's development in 1972. The award showcased the company's significant contribution to the success of the national development program.

International Cooperation

KHS was involved in several international cooperation programs namely to support other countries' agricultural development programs, especially in agricultural technology. KHS was appointed to support Sudan and Madagascar to develop these countries' agricultural technology. The support given was in the form of technical assistance, training and coaching on utilizing hand tractors.

KHS is currently actively engaged in exporting hand tractor products to 14 countries in Asia Pacific and Africa, America and Oceania. In addition to this, it also provides training programs in agricultural technology to seven countries in Asia and Africa.



Area of Expertise : Producers of Agricultural Machinery.

Strength and Achievements :

Focus on agricultural machinery; nation-wide network;

- 73% market share of hand tractors in Indonesia;
- Export to 14 countries, training in 7 countries;
- Capacity around 100,000 tractors/year.

International Cooperation Program :

Technical assistance and training in 7 countries of Asia and Africa.



Marine and Fisheries



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Kudus,
Central Java

Balai Besar Penangkapan Ikan (BBPI)

[National Fishing Development Center, NFDC]. Semarang



Introduction

The centre was established in 1975 as a technical implementation unit under the Director General of Fisheries of the Ministry of Agriculture. In 2014, it received its current status as the National Fishing Development Centre, NFDC, under the Ministry of Marine Affairs and Fisheries.

The NFDC is supported by 127 personnel, which includes 67 technical and functional staff. The centre received a budget of USD 2.6 million in 2016.

Main Activities

NFDC's activities centres on the fisheries sector, focusing on the development and application of technology in fish harvesting.

Aside from this, it also provides guidance to the Indonesian fishermen through its technical assistance programs. List of its main activities are

as follows: (i) Development of fish harvesting technology, (ii) Development of habitat for fish resources, (iii) Dissemination and technical assistance of fishing technology (including training), and (iv) Testing and the Issuance of Certification in fishing technology, such as fishing equipment.

Areas of Expertise.

The NFDC's main expertise is in developing fish harvesting technology, which includes fishing gears/tools, utilization of fish resources, fishing auxiliary engines and fishing boats. The NFDC is also an expert in the field of knowledge transfer, especially regarding the knowledge of fish harvesting technology the centre itself has developed.

Due to its expertise in these areas, the NFDC was able to conduct the following activities:



Established : 1975
Staff : 127 personnel including 67 technical & functional staffs
Budget : USD 2.6 million (2016)
Location : Semarang, Indonesia
Geo Coordinate : -6.948753, 110.418113

Address : Jl. Yos Sudarso, Kalibaru Barat, Tanjung Emas, Bandarharjo, Semarang 50175 Jawa Tengah, Indonesia
Phone : +62 24 3583065, 3583068
Fax : +62 24 3564568, 3583067
Web : bbpi-semarang.info
Email : bbpi_smg@yahoo.com

- Provide guidance and technical assistance (technology transfer) in fishing technology to fishermen (direct users), government officials (in regional offices), to students and the general public who are interested in learning about fish harvesting technology;
- Prepare standardized material of fishing and fish resource utilization techniques and carry out tests/examinations;
- Certify fishing equipment, fishing boats and the correct manning of fishing boat crew;
- Identify, inventorise, analyze implementations with regards to dissemination of the applications of fishing techniques and the utilization of fish as a resource.

Achievements

NFDC's achievements can be assessed from the technology it has developed as well as its success in transferring or disseminating its technology.

Technology Development for Fish Harvesting.

In terms of technology development, various techniques and materials were used. Some notable implementations achieved include:

- The construction of fish apartments. A fish apartment is an artificial habitat for fish and other sea biota used to increase biodiversity. The habitat is similar to an apartment, hence, the term "fish apartment" is used. This fish habitat engineering has been implemented in Wonogiri district;
- The NFDC has developed a fishing boat, the Catamaran Laganbar. This fishing boat has double hulls with a bridge deck, designed to create better stability and speed. Its wider deck allows the boat to cruise at a wider range in fishing operations. NFDC has handed over this type of boats to community enterprises in districts such as Trenggalek, Pacitan and Malang;

- The NFDC has developed a selective crab catcher that allows only certain sizes of crabs to be caught. This crab-catcher is developed in an effort to avoid overharvesting crabs and to maintain the ideal crab population-size.

Technical Assistance/Transfer of Technology.

The NFDC has developed and provided numerous technical assistance. In 2016, the centre achieved its goal of providing technical assistance to 2,200 participants (mostly fishermen) through one of its training programs.

Furthermore, there is also Special Technical Assistance program provided by the NFDC is tailored for personnels of government agencies in various regions of Indonesia and as of today has benefitted more than 600 beneficiaries.

International Cooperation

NFDC has carried out international cooperation activities for SEAFDEC members on fishing under the Ministry of Marine Affairs and Fisheries, which also acts as the executing agency. Furthermore, the NFDC has also contributed to the development of an international fishing gears catalog.



Area of Expertise : Fish Harvest Technology Development.

Strength and Achievements : Fishing technology; Man-made fish habitat.

- 2,200 participants: Technical assistance and dissemination (2016);
- 600 participants: on request technical assistance and training (2016).

International Cooperation Program : Training on Fishing for SEAFDEC members; Contribution on development of international fishing gears catalog.

Balai Besar Penelitian dan Pengembangan Budidaya Laut (BBPPBL) Gondol

[Institute for Mariculture Research and Development, IMRAD]. Bali



Introduction

IMRAD, located in Gondol, Bali, was founded in 1985 as the Research Centre for Coastal Marine Fisheries. In 2011, the institute became formally known as Marine Aquaculture Research and Development or Institute for Mariculture Research and Development, under the Ministry of Marine Affairs and Fisheries.

IMRAD is supported by 178 staffs comprising of 42 researchers, 93 engineering technicians, 42 administrative assistants and one librarian. As a government agency, IMRAD was supported with a budget of USD 2.95 million (as of 2016).

Main Activities

IMRAD conducts research and engages in activities related to the sector of marine fisheries. The institute's main activities, according to its mandate, are to conduct research in marine aquaculture and provide services to the community. These services include laboratory testing and training; library services; and hosting the centre's visitors.

Areas of Expertise

IMRAD focuses on two main research programs, i.e., research and development of marine aquaculture and development of applied mariculture technology.

In research and development of marine aquaculture, IMRAD has six priority programs: reproductive biology, genetics, biotechnology, nutrition and feed technology, pathology, and marine aquaculture ecology and environment.

The development of technologies implemented by IMRAD are intended to meet the needs of stakeholders such as the fishing community and the private sector engaged in marine fisheries.

Two types of technology implemented by IMRAD are hatchery and hatchery rearing. Hatchery technology is used in producing fingerlings such as red snapper (*Lutjanus sebae*), golden trevally (*Gnathanodon speciosus*), black kingfish/Cobia (*Rachicentron canadum*), yellow fin tuna (*Thunnus albacares*), and potato cod (*Epinephelus tukula*).



Established : 2011, pioneered since 1985
Staff : 178 person, which are 41 researchers & 69 technicians
Budget : USD 2.95 million (2016)
Location : Gondol, Bali, Indonesia
Geo Coordinate : -8.155673, 114.714286

Address : Dusun Gondol, Desa Penyabangan, Kecamatan Gerokgak, Kab. Buleleng, Bali (81105) PO. Box. 140. Singaraja
Phone : +62 362 92278, 92271
Fax : +62 362 92272
Web : p4b.litbang.kkp.go.id, imradgondol.kkp.go.id
Email : info.gondol@gmail.com

Achievements

IMRAD's accomplishments and achievements were based on activities conducted and the services it has provided. They are the following:

Results of Research and Development. The institute published its research results in the areas of technology packages, in terms of the cultivation of various fish species; which includes hatchery technology and nurturing of various types of fishes, biological products which comprise several new strains of fishes, including milkfish (G1), abalone (F3), Coral Trout brood stock, vaccines for grouper, and probiotics in feed for lobster and grouper, and technology components such as the cultivation of yellow fin tuna, feed for sea cucumber, artificial feed for lobster as well as increasing survival rate of coral trout grouper, in 2016.

Publication. Since 2006, the institute has produced over 800 publications in the form of books, proceedings, papers, and journal articles. IMRAD research results were extensively disseminated and published, both nationally and internationally. Between 2014 and 2016, there were more than 100 publications, including four international publications.

Dissemination. IMRAD actively disseminates information since 2001, as part of their obligation to socialize research results. In the last five years, IMRAD has organized 22 dissemination events, or an average of four dissemination events per year.

Certificates and Awards. IMRAD has achieved various certificates and awards which illustrates the recognition and appreciation for the institution's achievements. IMRAD's laboratory has been recognized by the National Accreditation Committee

as an accredited laboratory. IMRAD has also won the Citra Pelayanan Prima Award for its good services from the Ministry of State Apparatus and Bureaucracy Reform.

International Cooperation

International cooperation is part of the institute's long-term development vision. IMRAD has forged cooperation with various international research institutes and international development organizations. These international partnerships were generally established in the form of joint research and training. Highlights of such cooperation with international institutions are:

- ACIAR, Australia: Expanding spiny lobster aquaculture in Indonesia and improving fish health management and production protocols in marine fin fish aquaculture; improvement of hatchery technology for marine fish and feed development; and project on mud crab, nutrition, feed formulation and genetic for grouper;
- OECF, Japan: research on propagation of yellow fin tuna project;
- Oceanic Institute (OI), Hawaii: Milkfish breeding;
- JICA, Japan: Multi Species Hatchery.



Area of Expertise : Research and Development in Mariculture.

Strength and Achievements : One of the few research institutes in Mariculture;

- 13 Hatchery Technology (2016);
- 7 Biological products (2016);
- 800 scientific Papers during 2006-2016.

International Cooperation Program :

- OECF, Japan: research on propagation of yellow fin tuna project;
- Oceanic Institute (OI), Hawaii: Milkfish breeding;
- JICA, Japan: Multi Species Hatchery;
- ACIAR, Australia.

Balai Besar Perikanan Budidaya Air Payau (BBPBAP) [Main Centre for Brackish water Aquaculture, MCBA]. Jepara



Introduction

The Main Centre for Brackish Water Aquaculture (MCBA) in Jepara was founded in 1971. It was first established as a shrimp research centre. Soon, it evolved into its current form in 2001, which focuses on technology development and application related to brackishwater aquaculture.

MCBA is supported by 167 qualified personnel, including 79 technical and functional staff. The centre equipped with laboratories, workshops and fish ponds. As a government agency, it is supported with a state budget of USD 3.64 million, as of 2016. The centre has also a non-taxable revenue of USD 196,900.

Main Activities

MCBA Jepara's main activities centres on brackishwater aquaculture development and application of technology. The centre also carries out other related activities, such as fish production, dissemination, training and other cultivation technology services.

Activities related to engineering technology.

MCBA applies engineering technology in the following fields: genetic work (fish breeding), biotechnology (marine yeast, vaccines, the use of immune stimulant), live food and feed production (using local materials), seaweed farming, fish and shrimp hatcheries, fish health and environment-related issues.

The centres also offers support services, which can be classified into engineering technology, test laboratory, apprenticeship and studies, dissemination, production, and certification.

Concurrently, MCBA Jepara is also active in fishery production activities, such as production of fingerlings (grouper fish, milkfish and Vannamei shrimp), seaweed, Vannamei shrimp brood stock and farmed fish.

Dissemination activities undertaken by MCBA include conducting training programs on shrimp farming, seaweed farming and fish farming.



Established	: 1971	Address	: Jl. Cik Lanang, Bulu Jepara, Bulu, Kec. Jepara, Kabupaten Jepara 59418 Jawa Tengah, Indonesia
Staff	: 167 personnel involved sisting of 79 technical or functional staffs	Phone	: +62 291 591125
Budget	: USD 3,64 million (2016)	Fax	: +62 291 591724
Location	: Jepara, Central Java, Indonesia	Web	: www.bbpbap.jepara.djpb.kkp.go.id
Geo Coordinate	: -6.584340, 110.644728	Email	: bbpbapjpr@gmail.com, bbpbapjpr@kkp.go.id

The centre also encourages many activities which are relevant and support the progress and augmentation of knowledge and technology in brackishwater aquaculture.

Areas of Expertise

MCBA Jepara's expertise include hatchery and grow-out operations of fish and shrimp aquaculture, fish and shrimp broodstock, controlling aquaculture environment and fish disease, natural and artificial feed production, and production of vaccines and probiotics. Activities in these areas were undertaken to improve the knowledge and quality of fish and shrimp aquaculture production and also to encourage collaboration between the private and public sectors interested in this sector.

Achievements

MCBA Jepara has acquired an outstanding reputation for its expertise and excellence in shrimp farming. The centre has managed to innovate by developing the 'eye stalk ablation techniques' that enables the development of post-larvae shrimp production. Furthermore, MCBA has been successful in researching and developing home industry-level technology called 'backyard hatchery', in shrimp production. Within a short period of time, the backyard hatchery business has proven to increase the income of coastal communities in Jepara. This success has prompted the spread of similar activities to other regions in Indonesia.

The engineering technology of MCBA Jepara is recognized as superior and it is in line with MCBA's expertise in conducting engineering research. The superiority of its engineering technology is reflected by the 12 technological innovations that have been generated and widely applied by the public. These technological innovations are shrimp breeding and hatchery of 'Penaeidae family', milkfish and saline tilapia, seaweed production, crab hatchery

(mud crab swimming crab) production of live and artificial feed, production of new enzyme, production of probiotics, and the production of vaccine.

International Cooperation

One of MCBA Jepara's international cooperation programs was a joint research in shrimp farming with the Australian Centre for International Agriculture Research (ACIAR). Other forms of cooperation carried out were working visits by researchers from other countries to Indonesia or vice versa, in programs such as sustainable fisheries management training (cooperation between Ministry of Marine Affairs and Fisheries and Australian Awards Indonesia).



Area of Expertise : Brackishwater Aquaculture.

Strength and Achievements : Milkfish and shrimp cultivation.

- Shrimp eye ablation techniques;
- 12 Technological packages;
- Improvement of feed nutrients for milkfish brood stock;
- Technology to increase production using media recirculation.

International Cooperation Program : Joint Research Activities financed by Australian Center for International Agriculture Research (ACIAR) .

Balai Perikanan Budidaya Air Payau (BPBAP) [Brackishwater Aquaculture Development Center, BADC]. Situbondo



Introduction

BADC was first established as a location for Brackishwater Aquaculture in 1994. After undergone several transformations, as of 2014, it was officially known as a Brackish Aquaculture Development Centre. BADC is a government institute under the Ministry of Marine Affairs and Fisheries centre.

It is supported by 160 staffs including 17 professionals and 55 technical staffs, with a budget of USD 2.26 million, as of 2016.

BADC has one main office in Situbondo (laboratories, fish & shrimp hatchery and growout), and two installations in Situbondo (fish & shrimp hatchery, shrimp growout), one installation in Tuban (shrimp hatchery, shrimp grow-out & mass feed mill), and one installation in Pasuruan (fish & shrimp growout & seaweed).

Main Activities

The main activity of BADC is fishery, especially in brackish water aquaculture. The centre focuses on the development of aquaculture and other related activities including fish production, dissemination, training and the provision of services related to fish cultivation technology. Products produced by BADC are: fingerlings (grouper, milkfish and shrimp Vannamei), shrimp broodstock

of Vannamei, seaweed and farmed fish. The centre also promotes activities such as shrimp farming and fish farming (floating net cages).

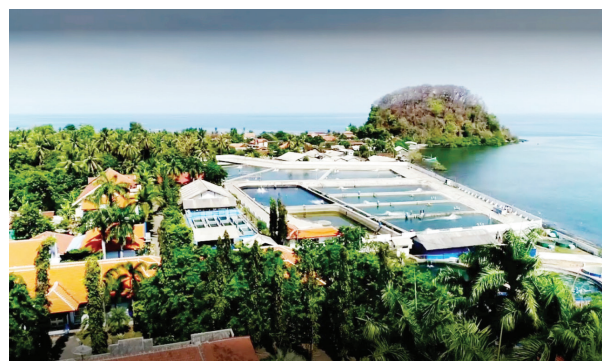
BADC is also active in disseminating information related to brackish water through education, training as well as hosting visitations. These activities include grouper hatchery, natural and homemade artificial feed, Vannamei shrimp hatchery, virus detection by PCR (polymerase chain reaction, a technique of identification by amplifying copies of DNA), best management practices in shrimp culture and vaccination of fish.

Aside that, BADC also offers technical assistance in technical consulting services, internship and provision of fisheries production testing facilities (feed, fish medicines, probiotics, fertilizers etc.).

Other services offered are related to diagnosis of fish and shrimp disease, analysis of histopathology and water quality, provision of artificial feed for fish and shrimp, proximate analysis of feed and fertility identification of plankton in ponds.

Areas of Expertise

The centre's expertise is centred on the following: shrimp, fish, and aquaculture. As a result of this focus on



Established : 1986
Staff : 160 personnel, including 17 experts and 55 technical staff
Budget : USD 2.26 million (2016)
Location : Situbondo, Indonesia
Geo Coordinate : -7.684464, 113.871950

Address : Jl. Raya Pecaron Po. Box. 5 Panarukan Situbondo 68351, Jawa Timur - Indonesia
Phone : +62 338 673328, 390043, 390299
Fax : +62 338 673328, 390043, 390299
Web : www.bbapsitubondo.com
Email : bbapsitubondo@yahoo.com

these three areas, the centre was able to produce three important products, namely : Vannamei shrimp, milk fish, and several strains of grouper. The centre has also developed some aquaculture technology, and the results of this technological development are disseminated to the local and international community through training programs and publication of journal articles. As of today, the centre mostly engages in business enterprise/ entrepreneurship as well as collaborating with local business communities and government agencies.

Achievements

BADC has developed into a qualified resource centre in Indonesia in the field of aquaculture technology and has produced several technology packages which are beneficial to the public. Some of these include grouper and shrimp cultivation technology, which is widely known to the Indonesian public. Dissemination is done through BADC's training programs, seminars and other various activities.

BADC is actively conducting research and publishing its research results in national and international scientific journals. Between 2006 and 2016, at least 100 academic papers have been published in various international scientific journals.

Two products, as a result of the centre's cultivation, have been recognized and approved for commercial distribution by the Ministry of Marine Affairs and Fisheries. These products are the Vannamei shrimp and Cantang grouper.

BADC also provides training activities related to research and services, such as:

- Several short courses and training programs on grouper fingerling production. One of these trainings, which were conducted from April–May, 2005, saw participants from countries such as Brunei Darussalam, Malaysia, Maldives, Marshall Islands, Singapore, Vietnam and Indonesia;

- Training Program on The Production of Grouper Fingerling. In 2006, this course saw participants from countries such as Australia, China, Hong Kong, India, Malaysia, Maldives, Myanmar, Qatar, Saudi Arabia, Singapore, Thailand, Vietnam and Indonesia. This is as of yet the most popular/ in demand course at BADC;
- International Training Program for African Countries on Marine Fisheries (May 2011). The program was conducted in cooperation with the Ministry of Marine Affairs and Fisheries and the Ministry of Foreign Affairs. Participants of the said training program came from African countries such as Ghana, Sudan and Tanzania.

International Cooperation

Activities in the area of international cooperation which are initiated and developed by BADC are generally in the form of research collaboration or joint research opportunities with international research institutes. The centre has also participated in large- scale researches, facilitated by several international institutions. These events are held both in Indonesia and overseas.

A side from joint researches, the centre has also participated in other forms of cooperation such as data, information and knowledge exchange and partnership, in provision of technical training. These international collaborations include:

- Cooperation with the United States, Australia, and NACA (Network of Aquaculture Centres in Asia Pacific), on hatchery production of grouper fish training;
- Twinning Program with the University of Arizona (2015–2017). Technical cooperation for research on shrimp diseases with the Aquaculture Pathology Laboratory of the Department of Veterinary Science and Microbiology at the University of Arizona;
- International Training related to Groupers Hatchery Production, in cooperation with NACA and ACIAR. More than 100 people, which includes researchers from 22 countries, were involved in the comprehensive training program.

Area of Expertise : Brackish Water Aquaculture Development.

Strength and Achievements : Groupers and Shrimps.

- 2 Patent Products;
- 100 Scientific Papers during 2006–2016;
- Has published its own journal since 2006 (10 Volumes).

International Cooperation Program :

- Networking with some International organization: NACA (Network of Aquaculture Centers in Asia Pacific), ACIAR Australia, JICA-Japan, University of Arizona.

Balai Besar Perikanan Budidaya Air Tawar (BBPBAT) [Freshwater Fisheries Aquaculture Main Center, FFAMC]. Sukabumi



Introduction

The Freshwater Fisheries Aquaculture Main Centre (FFAMC) is one of the largest centres for applied freshwater aquaculture in Indonesia. The centre's mandate is to develop freshwater aquaculture implementation techniques.

FFAMC was established in 1978 under the Ministry of Marine Affairs and Fisheries. The centre is supported by 128 staffs, including 76 experts and technical support. As an agency under the Ministry of Marine Affairs and Fisheries, the centre was given a budget of USD 2.4 million (in 2015).

Main Activities

FFAMC's main activities are all related to the freshwater fisheries sector. It is a centre for applied research but its focus is not only in research and the dissemination of research findings but also include the production of freshwater fish and the provision of technical assistance, certification, test laboratory, and training programs.

Research is the centre's core activity. It focuses on innovations of freshwater fish farming techniques.

Findings of new fish strain are published, and the new strain of fish may be released, produced and distributed to the market. Also, new techniques or methods found beneficial in the conducted researches will be applied in the propagation of freshwater fish and henceforth be harvested and sold in the market.

Technical assistance, or mentoring, is mainly provided to nearby minapolitans (fishery-based region), to assist and to enable fishermen to increase their output of freshwater aquaculture produce.

The centre also provides laboratory testing for the overall health of the fish and water quality.

The FFAMC's training program is aimed at the transfer of knowledge, particularly in the field of aquaculture techniques, as well as dissemination of information on innovative technologies.

Areas of Expertise

FFAMC's main expertise is in freshwater aquaculture, with a focus on research related to cultivation techniques, minagrow (recombinant growth hormone), probiotics, formula feed, fish health and environment, as well as residue.



Established : 1978
Staff : 128 staffs, include 76 experts and technical staffs
Budget : USD 2.4 million
Location : Sukabumi, Indonesia
Geo Coordinate : -6.906526, 106.935520

Address : Jl. Selabintana No. 37, Cikole, Selabatu, Sukabumi 43114 Jawa Barat, Indonesia
Phone : +62 266 225240, 225211
Fax : +62 266 225211
Web : www.bbpat.net
Email : info@bbpat.net

FFAMC is a major contributor to the development of freshwater aquaculture techniques. There are several product packages produced by the centre, including cultivation technology of intensive shrimp (Ugadi and Ugamed); fish farming technology with minagrow; catfish farming systems with biofloc; catfish aquaculture with aquaponics system; and Tilapia fish farming with Total Aquaculture system. Knowledge and applications of such innovations are disseminated through training programs, technical assistance and publications.

In addition to cultivation techniques, FFAMC also performs fish engineering to produce new strains, superior to existing ones. As a result, the centre was able to produce a range of excellent fish such as MANTAP carp, Sangkuriang Catfish 2, SIRATU prawns, SULTANA and GESIT Tilapia. They are produced as broodstock fish and fingerlings; and this production is distributed to the market.

FFAMC also provides quality system certification. Known as AQSys (Aquatic System Assurance), it was established by the FFAMC as a legal independent agency which provides certification services for quality management system (ISO 9001: 2008) to the public. The issuance of this certification is aimed at building and improving competitiveness of the Indonesian fishery products.

Achievements

Over the last 10 years, the FFAMC achieved much in research, production and public services. FFAMC had performed at least 15 major researches which generated various technology packages and new strains of fishes. The FFAMC has also received numerous awards for their accomplishments and achievements. Among the awards are Citra Pelayanan Prima Award from the Ministry of State Apparatus and Bureaucratic Reform for outstanding services performance in 2006, the Adibakti Mina Bahari Award in 2008 from the Ministry of Marine Affairs and Fisheries, the best

performance award in the field of Aquaculture (2012), and Unit Excellence Award in the provision of superior broodstock and implementation of technological innovation (2013).

Research on fish strains continues to the production level. In 2015, production reached 25.5 million fingerlings of carp, tilapia, catfish, prawns, patin and Gurame carp. In 2016, the centre was able to produce 4.5 million units of goldfish fingerling. In that same year, production of broodstock fish reached 288, 550, including carp, tilapia, catfish, prawns, patin, gurame carp, and nilam fish breeders.

The centre's laboratory has successfully tested about 12,000 samples, including water quality fish health, nutrition and residue. Certification is issued by FFAMC through AQSys (Aquatic Assurance system), providing certification for quality management system ISO 9001: 2008 for around 100 public cultivators.

FFAMC's training and dissemination of its research results served more than 10,000 people in various forums.

International Cooperation

FFAMC has extensive local and international network in terms of implementation of research, Research results are also disseminated through the international training programs conducted in Indonesia for international participants.

These international training programs are held almost every year. Some the most popular training programs are: the "International Training Program on Freshwater Aquaculture for Asia, Pacific and African Countries," held in 2012 with participants from Cambodia, Laos, Namibia, Tanzania, Timor Leste, Sudan, Sri Lanka, Zimbabwe, and Indonesia; and the "International Workshop on Community-Based Freshwater Aquaculture for Pacific and African Countries", organized by FFAMC in 2015.

Area of Expertise : Freshwater aquaculture.

Strength and Achievements : Engineering and application test.

- Trained more than 10,000 persons;
- 25.5 million fish fingerlings were produced and marketed;
- 288,550 fish brood stocks;
- 11,785 samples of laboratory tests.

International Cooperation Program :

- International Training Program involve more than 10 countries.

Balai Penelitian dan Pengembangan Budidaya Air Tawar (BPPBAT)

[Institute for Freshwater Aquaculture Research and Development,
IFARD], Bogor



Introduction

The Institute for Freshwater Aquaculture Research and Development (IFARD) was established as a fishery laboratory in 1927, and it later became a research institute in 1952. It went through a series of transformation until in 1984, the institute was named the Research Institute for Freshwater Fisheries. In 2011, it became the Institute for Freshwater Aquaculture Research and Development under the Ministry of Marine Affairs and Fisheries. The institute's main task is to engage in activities related to the research and development of freshwater aquaculture.

In carrying out its main functions and responsibilities, IFARD has employed competent human resources, consisted of 188 personnel, including 54 researchers and technicians. The institute has an annual budget of USD 1.8 million (2016).

Main Activities

IFARD deals primarily in freshwater fisheries sector. As a research institution, IFARD's main activities are divided into two segments: research and public service activities. Public service activities include: (a) laboratory testing, (b) literature information retrieval, (c) conducting internship programs, and (d) serving as host to visitors who are undertaking comparative studies.

Areas of Expertise

The institute has four specific areas of expertise, which are (i) Fish Breeding and Genetics, (ii) Fish Nutrition and Feed Technology, (iii) Aquaculture Technology and Toxicology; and (iv) Fish Health.

Achievements

IFARD has received numerous achievements. These achievements are in two main areas: (i) scientific publications and (ii) results of their technology.



Established : Started in 1927 as fishery laboratory and became a Research Institute in 1984
Staff : 188 staff including 54 searchers and technicians
Budget : USD.1.8 million (2016)
Location : Bogor, Indonesia
Geo Coordinate : -6.589898, 106.795678

Address : Jl. Sempur No 1 Bogor 16154
Jawa Barat - Indonesia
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Fax : +62 251 8327890
Web : www.p4b.litbang.kkp.go.id
Email : brpbat@yahoo.com

Publication. IFARD has published its research findings undertaken at the national and international level. In 2016, IFARD has published 45 scientific papers, including journals articles, working papers and proceedings at the national level, as well as 10 scientific papers published in international journals. Aside from academic papers, IFARD researchers have also published number of books.

Technological innovations. The institution have produced three technological innovations in the following categories: Biological Products, Aquaculture Technology, and Patented Products. IFARD has produced several superior biological products, including Goldfish Strain Sinyonya and Majalaya, Lobster Strain G. Macro, Freshwater Lobster (*Cherax* sp), *Streptococcus agalactiae* Vaccine, *Mycobacterium fortuitum* vaccine, *Flavobacterium* vaccine and Probiotics of anti- *Aeromonas hydrophila*. In aquaculture technology, IFARD researchers have developed artificial hatchery technology, earthen pond culture, floating net cage aquaculture, water recirculation technology, and aquaponics technology. For patented products, IFARD was presented with the Award of Recommended Technology in 2016 for the following products: Combined vaccine *Aeromonas hydrophila* and *Streptococcus agalactiae*; Aquaponic Yumina Bumina, Probiotic Multi species for Motile *Aeromonas* Septicemia disease control, and Grower feed for catfish and tilapia, Striped Snake head (*Channa striata*) Nursery Technology, Striped Snake head (*Channa striata*) natural and semi artificial propagation.

Certifications and Awards. IFARD has obtained a Certificate of Accreditation from the National Accreditation Committee as a testing laboratory, for achieving an SNI ISO/IEC 17025:2008, (ISO/IEC 17025:2005), and also passed the General Requirements for the Competency in Testing and Calibration Laboratories. IFARD is recognized

nationally as testing and calibration laboratory), which attests to their consistency in implementing the national standards.

IFARD can be regarded as one of the best research institutions in Indonesia. This can be shown from the numerous national and international awards obtained by the institute, including: (a) Research Excellence in Aquaponics from the President of the Republic of Indonesia; (b) Adi Bakti Mina Bahari/Best Research Award from the Ministry of Marine and Fishery, in 2012, 2014, and 2015; (c) Excellent Performance in National Technology from the Ministry of Research and Technology (2013); (d) The 1st Best Research in Agency of Research and Development from the Ministry of Marine affairs and Fisheries (2013 and 2015), and (e) Awards of Recommended Technology (2016).

International Cooperation

International cooperation is mainly established to enhance the institute's competitiveness, especially in joint researches. The following are the international research organizations and development agencies that have cooperated with the institute: ACIAR, FAO, DFID, IDRC, JICA, IRD, SEAFDEC and AQD.

Some of the joint researches undertaken include the following: [1] Development of Fish Disease Surveillance System with SEAFDEC AQD (Japan Trust Fund) in 2004-2005; [2] Fisheries and Aquaculture Capacity Building in 2014–2017 (Fish vaccine development) with Norway; and [3] Vaccination for fish disease control with Virbac France for the period of 2016–2018; [4] Pilot project of aquaponics, a collaboration between MMAF and FAFI (Fisheries and Aquaculture for Food Security in Indonesia) Wageningen.

Area of Expertise : Research in Freshwater Aquaculture.

Strength and Achievements : Technology innovation in biological products.

- 45 scientific papers and journal in 2016;
- 10 papers in International Journal;
- 4 Patented Products.

International Cooperation Program :

- International cooperation, mostly in joint research, with international research organizations and other development agencies: ACIAR, FAO, DFID, IDRC, JICA, IRD, SEAFDEC AQD.



Health and Population



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Kediri,
East Java

Badan Pengawasan Obat dan Makanan (BPOM)

[National Agency for Drugs and Food Control, NADFC], Jakarta



Introduction

The National Agency for Drugs and Food Control (NADFC) was established in 2001 as a supervision centre for food and drugs in Indonesia. This agency is an autonomous institution, and reports directly to the President. NADFC has provincial technical and operational units located all over Indonesia. These technical units were tasked to monitor the safety of food and drugs (within the provincial level) and to oversee the usage and limit the use of therapeutic products, narcotics, psychotropic substances, addictive substances, traditional medicines, cosmetics, and hazardous materials.

The agency's operation is supported by adequate experts. NADFC has 3,912 staff, including 2,174 pharmaceutical Supervisors. The budget for NADFC was USD 121.6 million in 2016.

Main Activities

NADFC is focused in the following activities related to drugs and food: laboratory testing, investigation, research, training, and maintaining an information centre.

NADFC offers laboratory testing to provide certification of drugs and food before commercial distribution is allowed. NADFC conducts post-market surveillance on

samples of medicinal products, traditional medicines, cosmetics, dietary supplements, and food by performing sampling and laboratory testing.

The agency's research centre of food and drugs is an essential unit to support drugs and food control. The research centre conducts laboratory and field work for its programs, research activities and investigations.

NADFC conducts training programs for government officials, professionals, managers and employees of both national and international food and drugs industry. The agency disseminates information directly through exhibitions, talk shows, interviews, counseling or indirectly through printed and electronic media.

Areas of Expertise

NADFC's core area is in drugs and food administration. It employs experts to carry out its tasks in the following areas: food and drugs law supervision, regulatory good practices as well as quality risk management.

Achievements

Laboratory. NADFC's laboratories have obtained ISO 17025 : 2005, a certification for Quality Management System for Laboratory.



Established : 2010
Staff : 3,912 personnel, including 2174 Pharmaceutical Supervisor
Budget : USD 121.6 million (2016)
Location : Jakarta, Indonesia
Geo Coordinate : -6.188473, 106.859671

Address : Jl. Percetakan Negara No.23
Jakarta 10560 Indonesia
Phone : +62 21 4244691, 42883309, 42883462
Fax : +62 21 4263333
Web : www.pom.go.id
Email : ppid@pom.go.id

Investigation. As a centre for drugs and food control in Indonesia, NADFC has gained achievements at both at the national and international levels:

- Recognition by WHO as a National Regulatory Authorities (NRA) to supervise and to ensure vaccine safety.
- Clinical Trial Authorization and Good Clinical Practice (GCP) inspection. NADFC officials have been appointed many times as resource persons for activities at the WHO Collaboration Centre on Global Learning Opportunities in Vaccine Quality.
- NADFC is a member of the Pharmaceutical Inspection Cooperation Scheme with a GMP (good manufacturing practices) standard for drug regulatory authority, which ensures the competencies of its inspectors.
- In 2016, NADFC was appointed as the national coordinator in the implementation of Opon Operation V, an Interpol-Europol operation to protect public health and safety, which resulted in one of the largest seizure of fake or substandard food.

Research. In the field of research and development over the last ten years, NADFC had published 38 publications, 22 poster publications, and 11 scientific papers/journals and magazines.

Training. At the national level, training programs were given to more than 1,000 participants (which comprises of NADFC officials, employees of other agencies, managers and employees from the food and drug industry). At the international level, over 100 participants have completed NADFC-organized training workshops. Some of the training programs that were managed and conducted by NADFC are:

- Training on “lot release” and vaccine testing. This training was held at the National Food and Drugs Testing Centre, for participants North Korea. It was funded by the WHO.
- Workshop on sharing Indonesia’s experience on Strengthening NRA Function in Vaccine Manufacturing for the Global Market with OIC Member States.

Information Centre. NADFC also provides state of the art information services. Among its services are:

- Innovation on Indonesian National Drugs Information. It is a compilation of information on approved drugs, as well as drug labelling.
- NADFC has a Single Sign On (SSO) system, featuring the INTR (Indonesia National Trade Repository) and the BTKI 2012 (Indonesian Customs Tariff Book) developed in 2011. With the SSO, exporters, importers and service users of the NSW (National Single Window) could easily access all licensing services and information.

Awards. Below are some of the awards and certifications garnered by NADFC over the last ten years are:

- E-Transparency Award (2014). NADFC received the best rating in terms of application of information and communication technology.
- Certification of PIC/S Quality System Requirement for Pharmaceutical Inspectorate (PI 0023);
- Certification of Quality Management System ISO 9001: 2008;
- WHO-NRA assessment for vaccine
- Accredited Laboratory IEC 17025:2005;
- OHSAS 18001 : 2007 for occupational health and safety management best practices
- ISO 27001 : 2013: Information Security Management System
- WHO Quality System Requirement for National GMP inspectorates (TRS 902 Annex 8,2002).

International Cooperation

NADFC has established international linkages with organizations and institutions abroad. Since 2012, it was become a member of the Pharmaceutical Inspection Cooperation Scheme (PIC/S). It has also signed an MOU with the United States Pharmaceutical Convention (USP) to conduct research on “Improving Quality Assurance and Quality Control of Essential Medicines in Indonesia”.

Area of Expertise : Food and Drugs Control.

Strength and Achievements : Authority in drug and foods control.

- 11 Scientific Papers published in journals and magazines;
- More than 1,000 participated in training programs conducted in Indonesia;
- More than 100 participated in training programs conducted abroad.

International Cooperation Program :

- Member in Pharmaceutical Inspection Cooperation Scheme (PIC/S) since 2012;
- MOU with the United States Pharmaceutical Convention (USP).

Pusat Pelatihan dan Kerjasama Internasional-Badan Kependudukan dan Keluarga Berencana Nasional (PULIN-BKKBN)

[Center of International Training and Collaboration – National Population and Family Planning Board, CITC -NPFPPB]. Jakarta



Introduction

Since 1970, Indonesia has served as a model for successful implementation of family planning. This success has inspired many countries to learn from Indonesia's experience in family planning and reproductive health.

Every year, NPFPPB hosts guests from various developing countries. As the number of visitors kept increasing, the NPFPPB formed a special unit called the International Training Program (ITP) in 1987 to respond to these increasing numbers and to facilitate the sharing session. Now, the centre is known as the Centre of International Training and Collaboration (CITC).

The CITC is run by 16 staffs, including eight managerial staffs, whom are also technical support. Training programs are conducted with the cooperation of universities and other institutions.

The program's efficiency in conducting its operations is reflected in its 2016 budget, which amounted to USD 1.2 million. This amount is mainly for the administrative expenses of CITC. The budget for technical activities is sourced from a different funder.

Main Activities

CITC conducts training programs and actively participates in international cooperation, especially regarding to population and family planning. With regards to its training programs, it also offers the following services: technical assistance as well as hosting and organizing visits and study tours to its centre.

Examples of implementation of training activities and international cooperation are as follows:

- Short Courses/Tailor-made training. These activities are intended to facilitate participation in short-term training programs and international workshops, or tailored international working visits (based on the needs of the participants);
- High Level Visits, which are intended to facilitate international events attended by state officials;
- Technical Training, which is provided to participants from other countries who wish to be trained in the various aspects of population and family planning in Indonesia;
- Technical Assistance, which includes providing assistance to other countries or agencies in terms of capacity building, and other matters.



Established : 1987
Staff : 16 personnel, including 8 technical staffs
Budget : USD.1.2 million (2016)
Location : Jakarta, Indonesia
Geo Coordinate : -6.249558, 106.881062

Address : Jl. Permata No. 1, Halim Perdanakusuma Jakarta Timur 13650
Phone : +62 21 8098018
Fax : +62 21 8008554
Web : www.bkkbn.go.id,
Email : pulin@bkkbn.go.id

Areas of Expertise

As part of NPFPB, the CITC focuses on providing training in the field of population, family planning, which includes reproductive health and family development program. These training activities are “demand driven”, as these training programs are tailored to the needs of the participants. Hence, government officials, employees of various organizations, students and educators from Indonesia and abroad may request for a customized training program on issues related to population and family planning.

Currently, one of the tailor-made training program that has successfully attracted many international participants is the Training on Developing Strategic Partnership with Muslim Religious Leaders. The objective of this training is to share views and experiences of the Indonesian Government in strengthening the role of Muslim leaders and faith-based organizations in Family Planning and Reproductive Health (FP/RH) program.

Achievements

Training results. As a centre of excellence for promoting or advocating population control and family planning, the CITC has successfully provided its services for more than 25 years. Thus far, its training programs were attended by more than 5,000 participants from 95 countries.

Technical Assistance. The NPFPB has sent several experts to other countries to provide technical assistance. Two Muslim leaders from Indonesia visited the Philippines from 21–23 October 2013 to provide assistance and develop a strategic partnership with Muslim leaders in Mindanao, and to train them under the Islamic-Based Organization and Muslim Leaders in Family Planning, Reproductive Health and Gender program.

Creating networks. Most of the training programs conducted by CITC were based on requests from international institutions. Some of the recent international training programs conducted are:

- Training on Developing Strategic Partnership with Muslim Religious Leaders in Family Planning;
- Training Course on Empowering Women through Family Planning and Economic Development Intervention;

- Training on Comprehensive, Rights-Based Family Planning Services;
- Internship Program in Family Planning for Youth Muslim Leaders in Autonomous Region in Muslim Mindanao;
- Family Planning Internship Program for Government Officials of Nepal during their visit in 2016;
- Training for Nepalese Delegates on Developing Strategic Partnership with Muslim Religious Leaders (MRLs) in Family Planning;
- Training for Guinea Delegates on Developing Strategic Partnership with Muslim Religious Leaders (MRLs) in Family Planning;
- Bridging Leadership Training on Family Planning Program for Bantul District Officials, Training on Population, Family Planning and Reproductive health for Officials of The General Office of Population and Family Planning (GOPFP), Vietnam.

Recognition and Awards. CITC’s achievements were recognized by various international institutions. Among of the awards received are:

- The Population Award for “Outstanding Contribution to the Awareness of Population Problems and Their Solutions” from the United Nations in 1989; and
- Award for Development Management by the Asian Institute of Management (AIM), Philippines in 1991, 1992, and 1993.

International Cooperation

International cooperation has become an integral part of CITC activities. CITC actively seeks and fosters international cooperation and has dedicated a special unit for this purpose. Memorandum of Understandings (MoUs) signed by the centre are as such:

- An MoU with The Commission on Population (POPCOM) Republic of the Philippines on the field of Population, Reproductive Health/Family Planning and Gender Mainstreaming; 30 August 2012;
- An MoU with The General Office for Population and Family Planning (GOPFP) of the Socialist Republic of Vietnam on the field of Population, Reproductive Health and Family Planning; 13 June 2014.

Area of Expertise : International Training on Population and Family Planning.

Strength and Achievements : Wide international network; Focus on Family Planning.

- Trained more than 5,000 persons from 95 countries.

International Cooperation Program :

Collaboration with International organizations, including: UNFPA, John Hopkins University.



Pharmaceutical



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Kediri,
East Java

Introduction

Bio Farma is a leading manufacturer of vaccines and immunosera established in Indonesia in 1890, serving the health sector for more than 125 years. Currently, Bio Farma is a state-owned pharmaceutical company, with the sole purpose of producing vaccines for human beings.

The company emphasizes on producing quality products, and is supported by sufficient human resources, both in terms of quantity and technical expertise. The company has 1,300 personnel, and most of them work in research and development, as well as production and marketing.

Main Activities

Bio Farma's main activities encompass four areas, research and development of biological and pharmaceutical products; production of biological and pharmaceutical products; marketing, trading and distribution of biological products, pharmaceuticals, medical devices; and health laboratory service and clinics.

Its research on new vaccines is aimed to support the immunization program of Indonesia, to secure the sustainability of country's vaccines, as well to meet the global need for affordable quality vaccine.

Areas of Expertise

Bio Farma's expertise is in producing vaccines for human beings. Vaccines produced by Bio Farma are virus vaccines (measles vaccine, oral polio vaccine, and hepatitis B vaccine), bacterial vaccines (DTP, TT, DT vaccine and BCG vaccine) and combination vaccines (DTP-HB, DTP-HB- Hib).

Achievements

Bio Farma is capable of supplying two-thirds of the global demand for Oral poliovirus vaccines (OPV). Currently, its products were distributed to more than 130 countries. Furthermore, Bio Farma's vaccines and some of its products are acknowledged to have met the international standard set by the World Health Organization as it has obtained the WHO- PQ or WHO's pre-qualification status, negating any doubts regarding its standards of quality, safety and efficacy.



Established : 1997 as a company but in operations since 1890
Staff : 1300 staffs
Location : Bandung, Indonesia
Geo Coordinate : -6.899107, 107.600380

Address : Jl. Pasteur No.28, Bandung 40161
 Jawa Barat - Indonesia
Phone : +62 22 2033755
Fax : +62 22 2041306
Web : www.biofarma.co.id
Email : mail@biofarma.co.id

Currently, four of Bio Farma's production process received patents; namely: (a) Rotavirus Vaccine Production Process Using Recombinant Trypsin for Activation Cultivation Virus, (b) A2,6 Sialil transferase gene overexpression *Macaca fascicularis* In Vero cells, (c) Cell Culture trachea *Macaca fascicularis* as a candidate substrate Virus, and (d) Recombinant plasmid Functioning as an Expression Vector for the excess production of Hepatitis B Surface Antigen (HBsAg) in *Hansenula Polymorpha*.

Bio Farma is continuously innovating and collaborating with local and international universities in terms of research and new product development. In 2011, Bio Farma initiated the National Vaccine Research Forum (FRVN) which aims at achieving vaccine sustainability within the auspice of the Vaccine Decade (2011–2020). In 2016, the forum has been renamed to FRLN (National Life Science Research Forum).

Bio Farma has acquired a number of accolades for its accomplishments. Some of these accolades are as follows:

- Innovation prize on national drug development from NADFC (2015);
- Indonesia Green Award 2015 from La Tofi School of CSR for the category of biodiversity development;
- Proper Gold Award (2014). Sustainable and holistic environmental management award, awarded by the Ministry of Environment and Forestry. This was awarded to Bio Farma, acknowledging them as a company which implemented holistic and sustainable environmental management;
- International Quality Award, Gold Category, Geneva in 2014. Bio Farma received the award at the 15th Annual BID Convention. The award was given to Bio Farma for its innovation and maintaining the quality of vaccine products;

- Global Green Award, Berlin, in 2014. This award was presented by the Association of Management & Consultancy-France in Berlin, Germany. This was awarded to Bio Farma as it consistently practices and applies the need for energy efficiency in all aspects of the company's activities.

International Cooperation

Although there is no international cooperation activity thus far, Bio Farma does have an international presence as it is part of many international working groups. Bio Farma's Director of Marketing was entrusted to be the President of Developing Countries Vaccine Manufacturers Network (DCVMN) for the period of 2014–2016. DCVMN is a network of vaccine manufacturers in developing countries.

In addition to an active role in the World Health Organization (WHO), DCVMN, Bio Farma served as the Chair of Self Reliance in Vaccine Production (SRVP) of IDB in 2010, as the Vice Chair of OIC VMG (Organization of Islamic Cooperation- Vaccine Manufacturer Group), Bio Farma was also entrusted as a member of the Board of Trustees of "IVI" (International Vaccine Institute), as well as being a member of the National Research Council.



Area of Expertise : Pharmaceutical and Biotechnology Industry.

Strength and Achievements :

Focus on Vaccine and Immunosera.

- Main Supplier of the world's demand for vaccine;
- 4 Patent Production processes.

International Cooperation Program :

- International network, including: WHO, DCVMN (Developing Countries Vaccine Manufacturers Network). IVI (International Vaccine Institute) OIC VMG (Organization of Islamic Cooperation – Vaccine Manufacturer Group).



Technical Vocational Education and Training



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Papua

Sekolah Menengah Kejuruan Negeri 7 (SMKN 7) [Public Secondary Vocational School 7, PSVS 7]. Semarang



Introduction

PSVS-7 Semarang was established in 1971 as one of seven pioneering schools of vocational technical education in Indonesia. It is one of the vocational schools with a four-year, instead of the usual three-year, program of study.

PSVS-7 Semarang is supported by 153 qualified teachers and an additional 39 educational support staff. These personnel serve in all aspects of the school's management; from technical to laboratory, and to warehouses. The school is funded via the government's School Operational Support the state budget of an estimated amount of USD 254,545 (as per year 2016).

Main Activities

PSVS-7 Semarang's main activity is to impart vocational education to students, to prepare them for the work force after graduation. As part of its educational program, the school has partnered with the industrial sector and has come up with relevant programs and activities.

The school also provides apprenticeship programs or technical assistance for students, as well as technical assistance and consultation services to other agencies upon request. For example, the school provides services in areas such as Building & Construction Designs, and Automotive Body Repairs.

Areas of Expertise

The school's expertise is reflected in the programs offered by the school, aiming to build confidence and competence in their skillset. PSVS-7 Semarang offers nine competencies:

- Building blueprint drawing;
- Stone and concrete construction;
- Communication electronics;
- Industrial electronics;
- Electricity power installation;
- Computer and networking; machinery;
- Light vehicles (automotive);
- Mechatronics



Established : 1971
Staff : 153 qualified teachers and 39 education support personnel
Budget : USD.254,545 (School Operational Support in 2016)
Location : Semarang, Indonesia
Geo Coordinate : -6.991005, 110.421419

Address : Jl. Jalan Simpang Lima, Semarang 50243 Indonesia
Phone : +62 24 8311532
Fax : +62 24 8447649
Web : www.smkn7smg.sch.id
Email : smkn7semarang@yahoo.co.id

Achievements

The school's achievement can be measured from its graduates' employability in the industry. PSVS-7 Semarang graduates are the most sought after by companies in the industrial sector. 85% of its graduates will start working immediately after completion of their studies. This is mainly due to the high level of competence of the graduates produced by PSVS-7 Semarang, as perceived by the industrial sector. Some graduates also go on to pursue tertiary education. Only a small percentage had to wait for some time before gaining employment.

Many students and teachers from this school have attained recognition and awards. In 2014, a teacher of PSVS-7 Semarang received an award for his achievement at the national level. He was presented with the "Science Creativity Innovation Community Award" by the Ministry of Research and Technology for his innovation in the field of electrical power: "The Electricity Technology That Is Convenient and Environmentally Friendly: Emergency Power Plant of Albatec".

The students received awards for their innovative products such as CNC Wood Craft, using modern manual wood carving tools; 3D Printers, using three-dimensional visualization of the model of a work piece; larder with ultraviolet technology; and solar power plant were also recognized in the industry as high quality and highly commercial.

Other awards obtained by the school and students are: Best Practice Education (Ministry of Education and Culture, 2015); National Scientific Research and Education Innovation (KIIP), 2015; Innovation Award of Sciences Society, 2014; and Outstanding Teacher,

2014; Teacher Competence Earning, Central Java, 2013. There were 11 more awards won by students between 2015 and 2016.

International Cooperation

Under a government cooperation program, PSVS-7 Semarang provided vocational training for teachers from Myanmar. Five teachers from vocational schools in Myanmar attended a training program in electronics held at PSVS-7 Semarang, for 14 days. The training program was sponsored by GIZ from Germany and was expected to improve the competence of teachers in Myanmar and Indonesia. During 2015–2017, the school received expert teachers from Malaysia who taught electricity power installation, mechatronic, stone and concrete competencies.

International cooperation also manifested in industrial partnerships, such as computer and network (skill) programs. For example, programs in computer engineering and networks were on-going since 2001, in collaboration with Cisco Networking Academy - an offshoot of Cisco Local Academy based in San Jose, California, United States.



Area of Expertise : Vocational Education.

Strength and Achievements : Vocational School with 4-year program.

- 2,400 student body;
- 153 qualified Teachers;
- 85% of graduates are employed upon graduation;
- Students' creation and Innovation: [1] CNC Wood Craft, [2] Printer 3D, [3] Robot Controller using Bluetooth, and [4] Solar Power Plant.

International Cooperation Program :

- PSVS-7 provided vocational training for teachers of vocational schools from Myanmar facilitated by GIZ from Germany;
- Collaboration with Cisco Networking Academy from Cisco Local Academy based in San Jose, California, United States.

Multi Media Training Centre (MMTC). Yogyakarta



Introduction

The Multi Media Training Centre (MMTC) was established in 1985 as a higher education institution, focusing on multimedia. It is a higher education institution owned by government, under the Ministry of Communication and Informatics.

Currently, MMTC's curriculum covers the field of broadcasting and multimedia. The School is open to the general public, but also organises training programs for employees of the Ministry of Communication and Informatics.

MMTC is supported by 184 staff, including 61 technical staff and lecturers. Most of the staff members are technical support in various studios and workshops. The institution receives an annual budget from the national government, amounting to USD 3.9 million (in 2015).

The institute also generates its own revenue, such as from conducting training programs and other educational services for the public or as per request by institutions.

Main Activities

When it was first established, MMTC focused in the educational and training sector. Although it now offers graduate programs as well, it still provides training because this service is highly demanded. In addition, it also undertakes research activities, which further supports the school in the provision of educational services.

Areas of Expertise

As a training institution with expertise in the field of multimedia and broadcasting, the MMTC offers six areas of expertise, i.e., Broadcast Production Management; News Production Management; Broadcast Studio Production Engineering



Established : 1985
Staff : 184 persons
Budget : USD 3.9 million (2015)
Location : Yogyakarta, Indonesia
Geo Coordinate : -7.751234, 110.361285

Address : Jl. Magelang KM. 6, Sinduadi, Mlati, Yogyakarta, Daerah Istimewa Yogyakarta 55284, Indonesia
Phone : +62 274 623537, 7474201, 562513, 561531
Fax : +62 274 623537
Web : www.mmtc.ac.id
Email : info@mmtc.ac.id

Management; Information Communications Management; Animation; and Gaming Design Technology.

This institution also offers short-term training programs. These short courses include Audio Visual Production; of Learning Multimedia Production; Camera and Editing - Techniques; 3D-Graphic Animation; and Multimedia Production Counseling.

Achievements

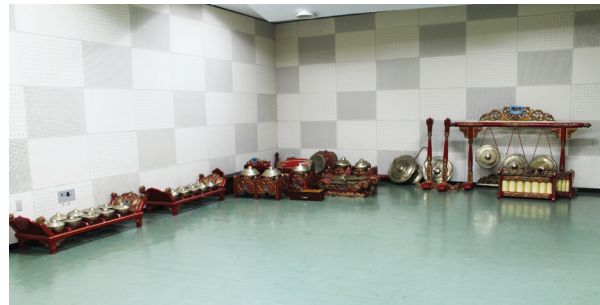
The research output of its teachers/lecturers are generally published in journals and magazines, locally and internationally. Since 2016, the institute has launched several own publications, namely the Journal of Broadcast Production, Journal of Report Production and Journal of Studio Techniques. In addition to these journals, the school also publishes a bi-monthly magazine.

Awards. Some of the recognition and awards are as such: (i) documentary by a student won the Eagle Award in 2014, (ii) a student's proposal was nominated in the Short Film Festival: XXI, Short Film Festival, in 2015, and (iii) "Amelie", a film made by an MMTC 2004 Alumni won the Best Fiction and the Best Film in a competition on Short Film Australia - Indonesia Centre (AIC) in 2016.

International Cooperation

MMTC has been involved in international cooperation since the 1990s. Between 1999 and 2015, MMTC has conducted international training programs in the production of documentary TV programs, such as: The Third Country Training Program (TCTP) on TV Documentary Program Production.

TCTP on TV Documentary Program Production was conducted for broadcasters in developing countries in Asia and Africa. In 2015, the participants were from: Bhutan, Cambodia, Timor Leste, Laos, Myanmar, and Zambia. These participants were able to produce their own TV documentaries during the program and they were expected to air these documentaries in TV stations in their respective countries.



Area of Expertise : Education and Training in Multimedia.

Strength and Achievements :

Focus in Multimedia and Broadcasting.

- Regular International Training on TV Documentary;
- Publishing Journal on Broadcasting (since 2015);
- Annual MMTC Film Parade (Film Conference).

International Cooperation Program :

- Regular International Training in collaboration with JICA-Japan, since 1990.

Lembaga Pendidikan dan Pelatihan POLRI (LEMDIKLAT) [Education and Training Institute – Indonesia National Police, ETI-INP]. Jakarta



Introduction

The Educational and Training Institute of the Indonesian National Police (ETI-INP) was first established in 1961 as the State Police Academy (SPN).

The main tasks of ETI-INP are: to plan, develop and provide education in relation to the police profession; managerial and leadership training; and academic and vocational education. The task also includes providing training programs to the officers in the police department.

Currently, the educational and training institute has 250 personnel, including 50 full-time education staffs, and 200 technical support and administrators.

Main Activities

As part of the educational arm of the National Police, ETI-INP offers training programs and other services.

In order to train students to be police officers, police education has two main tracks, namely the formal and non-formal track. In the formal track, the students will be directed according to their individual interests, talents and abilities. In the non-formal track, education and training activities are carried out with external funding from the ETI.

As part of its service to the community, the institute also provides internship training to students and technical assistance and guidance to people who are interested in studying police science and other police-related programs.

Areas of Expertise

ETI-INP specializes in police education. Specifically, its areas of expertise are in the provision of professional police education, managerial and leadership training programs for its officers and academic and vocational education for the general public. The education it provides emphasizes character building, which is reflected in the philosophy of ETI: Capable, Commendable, Excellent and Law Abiding.



Established : 1961
Staff : 250 personnel: 50 core staffs & 200 technical support & management staffs
Budget : N/A
Location : Jakarta, Indonesia
Geo Coordinate : -6.286593, 106.770963

Address : Jl. Ciputat Raya No.40, Pondok Pinang, Kebayoran Lama, Jakarta Selatan
Phone : +62 21 7509540
Fax : +62 21 7509539
Web : www.lemdiklat.org
Email : kermadiklat.lemdiklat@gmail.com

Achievements

As an educational institution, the achievement of ETI-INP is based on the number of its graduates. The institute generates police officers from the following training units: 300 cadets graduate from the Police Academy annually; 20,000 NCO including 1,500 female officers graduate from the Brigadier unit between 2013–2015; 600 female police officers graduate from SESPOLWAN; 600 new police personnel graduate annually from the National Police School (SPN) in Lido (Sukabumi); and an average of 300 new police personnel graduate annually from the National Police Schools in Sumatra and Sulawesi.

Recognition and Awards have been received by ETI-INP, namely: International Certificate from the Professional Certification Body in the United States in recognition for ETI-INP as a police training institute with international standards; and Certificate from the National Professional Certification Board (BNSP) in recognition of ETI-INP as a competent national Institute of special training for national police profession.

International Cooperation

ETI-INP has established solid cooperation with both national and international educational institutions, in the form of international exchange programs for police officers. Aside from this, training programs were also provided by the institute to police officers and security personnel from other countries.

Selected activities related to international cooperation include:

- In 2012, ETI-INP managed an educational and training program for 50 personnel from the Afghan police force, organized by UNDP in Kabul;
- In 2014, ETI-INP collaborated with the Dutch government to improve the quality of education and training of the Indonesian national police force;
- In 2015, ETI-INP provided the Myanmar police force a special training in security during elections. It was provided to 25 personnel from the Myanmar police force, which consisted of 1 Brigadier and 24 middle-ranking officers;
- And in 2016, ETI-INP organized a training program from the Ministry of Foreign Affairs for 10 Palestinian police officers and 20 police personnel from Asia Pacific countries.



Area of Expertise : Police Education and Training.

Strength and Achievements : Professional Education Services.

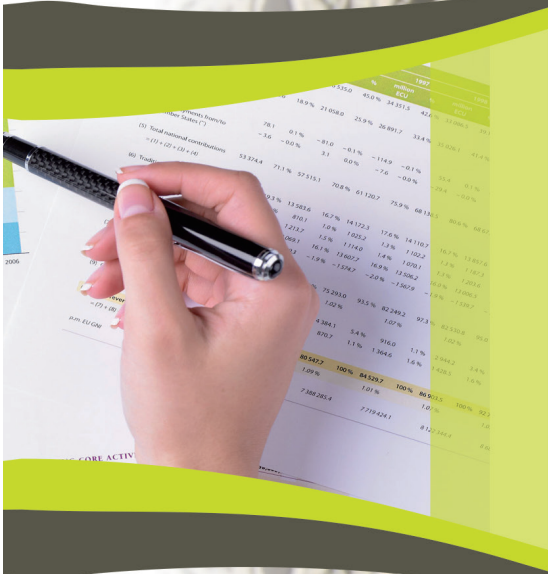
- Structured and Professional;
- 300 cadet yearly;
- 600 Woman Police graduate yearly;
- Education Units under Lemdiklat: [1] School of Staff and Head of High Officers (SESPIMTI) in Bandung, [2] Institute of Police Sciences/ Higher Education of Police Sciences (STIK/ PTIK) and Police Academy in Jakarta, [3] Institute of Officer Establishment (SETUKPA) in Sukabumi, [4] School of Woman Police (SESPOLWAN) in Jakarta, [5] Education Center for Criminal Investigation (PUSDIKRESKRIM) in Bogor, [6] Traffic Education Center (PUSDIKLANTAS) in Tangerang, and [7] Center of Public Education and Development (PUSDIKBINMAS) in Ambarawa, Central Java.

International Cooperation Program :

- 2012: LEMDIKLAT-POLRI managed education and training for Afghan police for 50 personnel facilitated by UNDP Kabul;
- 2015: Myanmar police special training for 25 personnel;
- 2016: Special training for 10 Palestinian police officers and 20 police personnel from Asia Pacific countries.



Planning and Budgeting



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South and Triangular Cooperation

Batik Kudus,
Central Java

Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional (BAPPENAS) [Ministry of National Development Planning/National Development Planning Agency/BAPPENAS]. Jakarta



Introduction

Ministry of National Development Planning (BAPPENAS) is the ministry in charge of national development planning. The establishment of Bappenas may be traced back to the history of the Republic of Indonesia. At the dawn of the country's independence, the ministry was known as the "Economic Planning Agency", was responsible for formulating economic development plans. Over the years, the agency's organization has evolved in response to Indonesia's national development. The agency was officially named Bappenas in 1963.

Bappenas focuses on the development planning, dividing the ministry into eight section. Each section is assigned a deputy who is in charge of the following: (i) economy, (ii) regional development, (iii) maritime and natural resources, (iv) population and employment, (v) human development, community, and culture, (vi) politics, law, defense, and security, (vii) development funding, and (viii) monitoring, evaluation, and development control.

As a ministry in charge of formulating and consolidating plans for the country, it is supported by 865 personnel, including 154 functional staff or professionals and 151 planning support staff.

Main Activities

The ministry's main activity is development planning. In this case, the Directorate of Development Funding Allocation (DDFA) in Bappenas has a specific task in the field of development funding allocation. It is the focal point in the development planning and funding allocation.

In Bappenas, the DDFA is responsible to undertake the following:

- Policy planning in the field of development funding;
- Coordinate the implementation of policy in the field of development funding;
- Prepare a development funding allocation plan (in the national context),



Established : 1963 (Bappenas) and
2008 (DDFA-Focal Point)
Staff : 865 Staff
Location : Jakarta, Indonesia
Geo Coordinate : -6.200733, 106.832453

Address : Jl. Taman Suropati No.2 Jakarta 10310
Phone : +62 21 3193 6207
Fax : +62 21 3145 374
Web : www.bappenas.go.id

- Monitor, evaluate and assess the performance of the national development plan that was implemented (in the field of development funding allocation);
- Prepare a work plan on the implementation of tasks, as well as coming up with an evaluation and report on the implementation.

Areas of Expertise

With its mandate, Bappenas is an effective coordinator of development planning for all ministries, agencies and government entities, including the local government. Bappenas functions as a steering agency, which guides development planning; to ensure that it is structured, strategic, comprehensive and cross-sectoral.

Achievements

Bappenas has been involved in national development planning, including special activities related to development financing, since the early days of Indonesia's independence. Documentation and publications of these activities and their results are publicly available on its website.

Publications. Bappenas has carried out numerous studies related to development planning, as well as planning and budgeting. Results of these studies can be found in reports, separate papers, or papers published in journals. Such papers and reports, specifically in topics related to 'planning and budgeting' are readily available and can be obtained from the Bappenas' website.

Capacity Building and Technical Assistance. Achievements are also reflected in the range of services provided, such as technical assistance, consulting, and knowledge and experience sharing. These activities were offered both on consultant-basis (through consultation or in broader

framework) and through bilateral cooperation between countries.

A recent sharing of experience on planning and budgeting between Indonesia and Myanmar is one example. Activities done within the South-South and Triangular Cooperation framework, the Ministry of National Development Planning, UNDP, Norwegian Embassy and the Ministry of National Planning and Economic Development of Myanmar held a Country Sharing of Experience forum on Planning and Budgeting from 25 to 31 October 2015 in Jakarta and Yogyakarta. This event was attended by 21 participants from The Republic of The Union of Myanmar.

International Cooperation

In carrying out development planning, Bappenas has participated in international cooperation through frameworks such as the SSC and SSTC, as well as bilateral and multilateral cooperation with various international agencies as partners.

The bilateral and multilateral partners of Bappenas include: the Australian Agency for International Development (AUSAID), Canadian International Development Agency (CIDA), Korea International Cooperation Agency (KOICA); Asian Development Bank (ADB), Islamic Development Bank (IsDB), and United Nations Development Programme (UNDP).



Area of Expertise : Development Planning.

Strength and Achievements :

Country Sharing of Experience on Planning & Budgeting.

- Numerous Research papers;
- Numerous Planning documents.

International Cooperation Program : The bilateral and multilateral partners of BAPPENAS are among others : Australian Agency for International Development (AUSAID), Canadian International Development Agency (CIDA), Korea International Cooperation Agency (KOICA); Asian Development Bank (ADB), Islamic Development Bank (IsDB), United Nation Development Programme (UNDP), etc.



Micro Finance



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Kudus,
Central Java

BRI International Institute for Microfinance (BRI-IIM), Jakarta



Introduction

Initially, in 1977, Bank Rakyat Indonesia International Institute for Microfinance (BRI-IIM) was only an International Visitors' Unit. In 2008, the unit was transformed into BRI's Microfinance International Cooperation (MIC). The MIC was then transformed into BRI-IIM in 2015. BRI-IIM is a special section under BRI's Micro Business Division, with the primary function of developing a world-class microfinance business. It is a centre of excellence in microfinance.

As a special unit, BRI-IIM is supported by 56 personnel, including 16 trainers with expertise in microfinance. Moreover, BRI-IIM has a network situated throughout the rural areas in Indonesia. BRI-IIM's administrative expenses at the main office is supported by a budget of USD 456,000, as of 2016. This budget does not include expenses for external technical activities.

Main Activities

BRI-IIM, like its parent organization BRI, is focused on the financial sector, in which its main activities centres on capacity building in microfinance development. Generally, it covers training activities offered through the Microfinance Training and Study Visit (MTSV). These activities include in-house trainings; conference and study visits; technical consultancy on microfinance; seminars and workshops related to international microfinance.

Although the main activities of BRI-IIM are organizing training programs and workshops BRI-IIM also covers the development of micro and small businesses as well as activities related to the development of the following services: consulting and technical assistance, cooperation, networking, community development, entrepreneurship development and small business incubation.



Established	: 2008	Address	: Jl. Jenderal Sudirman Kav. 44-46, Jakarta 10210, Indonesia
Staff	: 56 personnel, including 16 trainers	Phone	: +62 21 5752 920
Budget	: USD.456 thousand (2016)	Fax	: +62 21 5752 920
Location	: Jakarta, Indonesia	Web	: www.bri-institute.com
Geo Coordinate	: -6.216944, 106.813812	Email	: contact@bri-institute.com

Areas of Expertise

BRI-IIM's expertise is in developing and organizing educational and training programs in microfinance. This is in line with the objective of BRI-IIM to support its parent- company BRI, which is to support the development of business in microfinance and microenterprises.

Achievements

One of BRI-IIM's achievements is successfully conducting its programs with more than 7,000 participants in total through workshops, study visits, consultancy, and other trainings in microfinance since the 1990s. In addition to this, between 2015–2016, more than 185 participants from 23 countries participated in international study visits, consultancy, workshops, and training provided by BRI-IIM. These activities solidify BRI's position as a world-class microfinance class laboratory.

BRI's achievement in microfinance is also shown in the growth of loans granted and number of customers served. Data on the micro-loan segment indicated that until the end of 2015, total amount of micro loans granted has grown by 16.8% (reaching USD 13.25 billion) in comparison to the previous year. The number of customers also increased to 7.9 million from 7.3 million. With the provision of outstanding micro credit amounting to USD 13.25 billion in 2015, BRI became the biggest micro-banking provider in the world.

For promoting microfinance in Indonesia, BRI has received recognition and many awards, both nationally and internationally. Among the national and international awards are:

- The Best Microfinance Business in 2015, from Asian Bankers. The award was given on 19 March 2015;
- The Social Business Innovation Award in 2015 for BRI's contribution to Economic Development for Rural Communities through Micro - Loan Program from Warta Ekonomi. It was awarded on 25 August 2015.

International Cooperation

International cooperation is important to BRI-IIM as it is the very reason BRI-IIM was established. i.e., to accommodate foreign visitors interested in microfinance. The number of international visitors serves as a key indicator of its success in this area. BRI- IIM has also forged cooperation with various international microfinance institutions such as Asia-Pacific Rural and Agricultural Credit Association (APRACA), Microfinance Network (MFN), Banking With The Poor (BWTP), Woman World Banking, etc.



Area of Expertise : Business Development of Microfinance.

Strength and Achievements :

Nation-wide network.

- More than 7000 participants since 1990;
- 185 participants from 23 countries (2015-2016);
- Network covers 10,000 units in Indonesia;
- 7 Microfinance Training Centers;
- Dummy Bank and Library.

International Cooperation Program : BRI-IIM has been cooperating with various microfinance institutions in the world, such as Asia-Pacific Rural and Agricultural Credit Association (APRACA), Microfinance Network (MEN), Banking With The Poor (BWTP), Woman World Banking, etc.



Transportation



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Jepara,
Central Java

Pusat Penelitian dan Pengembangan Jalan dan Jembatan (PUSJATAN) [Institute of Road Engineering, IRE]. Bandung



Introduction

The Institute of Road Engineering (IRE) was officially established in 1984 under the Ministry of Public Works and Housing (MPWH), as a research centre. IRE's task is primarily to conduct researches related to the development of public works for roads and bridges.

IRE has adequate resources to support its activities. The institute is supported by 297 staffs, consisting of 216 administrative officers and 81 technical experts.

As a government agency under the MPWH, IRE is state-funded, with a budget of USD 12.389 million (as of 2016). Aside from state funding, IRE has also received funding as a service provider, with non-taxable revenues of USD 486,000; which guarantees continuous funding for its operations and services.

Main Activities

IRE focuses on the infrastructure sector. It undertakes research and development (R&D) in the construction of roads and bridges. Specifically, areas covered by its (R&D) include the following: (i) bridge structure, (ii) road geotechnics, (iii) system and traffic engineering, (iv) road pavement, and (v) substation for asbuton.

The institute's main activities are generally divided into four interrelated fields, namely: research and development, technical advisory, test laboratory, and training.

Areas of Expertise

IRE's expertise lies in the development of roads and bridges. Technical experts conducting R&D have the following expertise: bridge construction, road geotechnical, traffic engineering, and materials and pavement engineering. Some of the important R&D activities currently undertaken are:

- Elevated road using combination of corrugated steel and cellular lightweight mortar (CMP);
- Modular bridge using prefabricated steel components;
- Warm-mix 'Asbuton'. (A sbuton is a natural asphalt from Buton island);
- Jalan Kita Application (A smartphone application to be used by road users community to involve them in giving information regarding the current detailed condition of roads and bridges they happen to pass by);
- Road Side Station (Rossita) in national, provincial and local roads.



Established : 1984. Pioneered since 1925
Staff : 297 staffs, including 81 Technical Experts
Budget : 12.389 million (2016)
Location : Bandung, Indonesia
Geo Coordinate : -6.908111, 107.685639

Address : Jl. A.H. Nasution No.264, Arcamanik, Cisaranten Bina Harapan Bandung 40294 Jawa Barat
Phone : +62 22 7802551-53
Fax : +62 22 7802726
Web : www.pusjatan.pu.go.id
Email : info@pusjatan.pu.go.id

Research results are generally packaged in several technology packages suited to the needs of the users. IRE has specialized skills to make the engineering technology packages specific and customized. These packages are regularly updated and launched.

Achievements

IRE is one of the few institutions that focuses on applied technology of roads and bridges. All products are packaged in a standardized form to be used as reference for construction and maintenance of roads and bridges. A recent achievement of R&D is the launch of 36 technology packages in 2017 as the institute's "masterpieces". These include: 1) Cold Paving Hot Mix Asphalt (CPHMA); 2) Steady Fast Fillings (TCM); 3) Bima-Light Friedtest; 4) Lightweight Pile; 5) Corrugated Mortar Pusjatan (CMP); 6) Asymmetric Village Bridge (Judesa); 7) Structural Health Monitoring System (SHMS); 8) Concrete with minimum cement using the Fly Ash; 9) Special Stopping Space (RHK); 10) Traffic Early Warning System (Sindila); and 11) Remote Control Monitoring System (RCMS).

One of their masterpiece, Corrugated Mortar Pusjatan (CMP) has contributed to the infrastructure sector in Indonesia. CMP is a mix of two technologies, consisting of corrugated steel from Korea and lightweight concrete embankment from IRE. This is a breakthrough because lightweight concrete embankment is a solution for soft soil problem using foamed mortar. The mortar foam is a mixture of cement, sand, water, and foaming agent plus water. The advantages from CMP are cost saving of up to 70%, speed up building time by up to 50%, service life of up to 100 years and cost saving in land acquisition.

IRE excels in laboratory testing. Expertise in this field is relatively rare and IRE has an advantage in laboratory testing because it is supported by four research centres wherein each centre has its own adequate laboratory.

Tests conducted in IRE's laboratories cover a wide range and approximately 200 laboratory tests are conducted each year. In the laboratory of Materials and Pavement, most of its experiments are related to test asphalt, aggregates, and soil. Most of the tests conducted in the Centre of Geotechnics Roads are related to woven geotesting. In the Centre of Bridge structure, the highest demand is for rubber bearings material test for bridges, while the Centre for Traffic System and Engineering received requests to test traffic management.

International Cooperation

International cooperation is undertaken by the IRE to strengthen the institute's core business in research and development. Both international and national cooperation that was carried out by the IRE was also aimed at extending and expanding its service network.

IRE has sustained a productive and beneficial collaboration with many international agencies, which includes:

- The Korea Transport Institute (2017–2019), which covers implementing cooperative and joint research programs in the fields of policy and technology related to transport, road and highway, logistics, urban mobility, etc;
- Research Centre for Integrated Transport Innovation (RCITI) at the University of New South Wales – Australia (2016–2020), which covers the exchange of faculty and staff and the exchange of academic materials and publications;
- International Institute for Land and Infrastructure Management – Japan (2010–2019). This cooperation aims to conduct R&D on Traffic Data Collection Technologies, and on environmentally-friendly transport system for two-wheeled vehicles;
- Civil Engineering Research Institute – Japan (2014–2019); to conduct R&D on problematic soil.

Area of Expertise : R&D in Roads and Bridges.

Strength and Achievements : Technology based on local resources, customized to the market.

- 200 laboratory test yearly;
- Launched 35 new Technological Packages as 'Master Piece' (2017).

International Cooperation Program :

- The Korea Transport Institute (KOTI) – Korea (2017–2019);
- Research Center for Integrated Transport Innovation (rCITI) at the University of New South Wales – Australia (2016–2020);
- National Institute of Land and Infrastructure Management (NILIM) – Japan (2014–2019);
- Civil Engineering Research Institute – Japan (2014–2019);
- POSCO Steel Solution Center – Republic of Korea (2014–2017);
- Industrial Liaison Program of the Massachusetts Institute of Technology – USA (2014–2017);
- International Institute for Land and Infrastructure Management – Japan (2010–2019).



Appropriate Technology



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Banten,
West Java

Pusat Pengembangan Teknologi Tepat Guna-Lembaga Ilmu Pengetahuan Indonesia (PP TTG-LIPI)

[Development Center for Appropriate Technology- Indonesian Institute of Sciences, DCAT-IIS]. Subang



Introduction

The Development Centre for Appropriate Technology - Indonesian Institute of Science (DDCAT-IIS) is a technology development centre under the Indonesian Institute of Sciences (IIS). The centre was first established in 1986 as a research technology implementation unit of Centre for Applied Physics.

DCAT-IIS received its current status in 2014 as the Centre for Appropriate Technology. It is currently based in Subang, West Java. Its main objective is to develop and implement appropriate technologies.

As a development centre, DCAT-IIS is supported by 118 personnel, including 52 experts, 18 technicians, and 48 administrative support staff. As a government agency, DCAT-IIS's budget stands at USD.1.508 million (in 2016).

Main Activities

DCAT-IIS is mainly involved in agriculture and agriculture-based industries, with a focus on post-harvest technology development.

Activities in small scale agro-based industry centers on machinery, equipment as well as conducting research on post-harvest processes. Development activities are aimed at supporting the development of the agricultural sector, and to support the small -and medium- scale enterprises (SMEs), with appropriate technology. The discovery or the creation of appropriate technology will be provided to the agricultural workers and other intended recipients through its training programs and consulting services.

DCAT-IIS disseminates information regarding its development and findings on appropriate technology through print publications and electronic media. The centre is committed to allocate 10% of its budget for the purpose of information dissemination and transfer of technology.

In short, DCAT-IIS's activities covers four main areas, i.e, development of appropriate technology, training programs, consulting services, and dissemination of information.



Established	: 1986	Address	: Jl. AS Tubun No 5 Subang 41213 Jawa Barat
Staff	: 118 staffs, including 52 experts & 18 technicians & 48 administrative	Phone	: +62 260 411478, 412878
Budget	: USD.1.508 million (2016)	Fax	: +62 260 411239
Location	: Subang, Indonesia	Web	: www.ttg.lipi.go.id
Geo Coordinate	: -6.554333, 107.762039	Email	: b2pttg@mail.lipi.go.id

Areas of Expertise

DCAT-IIS's areas of expertise include engineering and development of appropriate technologies, process engineering and agriculture-based industrial production systems.

DCAT-IIS undertakes development of appropriate technology mainly to cater to the needs of small businesses; and the technologies which are currently applied at the moment are corn noodle machines (machines for turning corn into noodles) and multi-purpose slicer, or special cutters, for cutting cassava into thin slices.

Achievements

DCAT-IIS range of products are generally distributed directly to the people for implementation so that it could generate benefits for small and medium enterprises. A selection of these achievements are as follows:

Patented Products. DCAT-IIS has produced 35 patented technological products, all which are applicable and relevant to support the SMEs and the industry. Currently, there are 12 companies adapting the DCAT-IIS' technology on production process. These include pasta production, such as making spaghetti from corn flour using extrusion technology; calcium biscuits made from processed banana powder; and production of noodles from corn flour. Patented products in 2016 include the following: (I) Crushing blade, (II) Aloe vera-based herbal drinks, (III) Tool component makers 'concrete frame disassembly', (IV) Biogas dryer for agricultural products.

Training and Conference. DCAT-IIS both offers and organizes national and international training programs and conferences. In 2016, the centre held 40 national and international training programs; national programs consisted of trainings on appropriate technology

development and coconut processing equipment technology in Nias, and trainings on technical competence in chemical industry in Subang.

DCAT-IIS also participated the international programs in AHEC (Alternate Hydro Energy Centre) in 2003, 2009, and 2014 in India Institute Roorkee.

Publications. DCAT-IIS has disseminated research results and best practices through print and electronic media. The centre published these results in 63 international proceedings, 6 articles in international journals, and 170 papers and articles in national journals.

Recognition and Awards. The centre is well known as an institution that provides much attention to the plight of small businesses and is supportive to their needs. Based on this reputation and its work, DCAT-IIS received awards for its achievement and success in supporting small businesses.

In 2011, DCAT-IIS was awarded the XL Technopreneur Award, and was selected and recognized by the Indian Government as Focal Point of Grassroots Innovation.

International Cooperation

DCAT-IIS has long built its involvement in international cooperation as part of its strategy to expand the range of its research. International cooperation has also served as a path toward advancing the centre's activities and products.

The centre has established international cooperation with the following research institutions abroad: India's Indian Institute of Management and Indian Institute of Technology, Roorkee; APCCT (Asia and Pacific Centre for Transfer of Technology); and Thailand's Asian Institute of Technology.

Area of Expertise : R&D in Appropriate Technology.

Strength and Achievements : Applied technology relevant to SME Support Development.

- 63 Global proceedings;
- 176 journal papers;
- 35 Patented products;
- 110 engineering packages;
- 1,580 beneficiary of technical assistance, including 14 small enterprises with branded products.

International Cooperation Program : International cooperation that has been established mainly with research institutions from various countries (I) Indian Institute of Management, (II) Indian Institute of Technology, Roorkee; (III) APCCT (Asian and Pacific Centre for Transfer of Technology); and (IV) The Asian Institute of Technology.



Industry

MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation



Batik Aceh

Balai Besar Industri Agro (BBIA) [Center for Agro-Based Industry, CABI], Bogor



Introduction

Centre for Agro-Based Industry (CABI) is a research institution under Ministry of Industry. CABI first established in 1890 as an agricultural testing laboratory under the name of Agricultuur Chemisch Laboratorium. Later, the laboratory shift focus towards the agro-industrial area. In 2002, it was officially transformed into its current status as the Centre for Agro-Based Industry.

CABI is supported by 211 staff, including 48 experts in agro-industrial products and systems. It is funded by a state budget of USD 4.218 million (2016).

Main Activities

CABI is engaged in activities related to the development of agriculture-based industry. In addition to its main activity in research and development, CABI also offers services such as Technical Inspection, Laboratory Testing, Certification, Calibration, Training, Technical consulting, Design and Engineering of Industrial equipment, and Proficiency testing.

Areas of Expertise

CABI's main expertise is in the field of agro-industry engineering. Research and development activities are focused in downstream agro products, such as: coconut,

seaweed, snapper, cacao, tubers, fruits and vegetables, and other home-grown commodities from certain locales, active compounds, and agro-based renewable energy.

Testing laboratory services, Proficiency testing, consultation, training, certification and calibration are offered for the general public, including private companies in the agro-business industry. The provision of these services will enable companies to obtain an SNI (Indonesian National Standard) certification. An SNI certification will indicate the implementation of industry-standard Quality Management Systems (i.e: ISO 9001, HACCP; and ISO 22000).

The training services offered include technical consultation, design and engineering of industrial equipment. These services are for agro-industrial companies which seek for better performance through competency augmentation and improvements in manufacturing processes.

Achievements

For ten years, CABI has progressed and attained achievements in research and services that it has provided. Its achievements were shown through the quantity and quality of its products, recognized



Established	: 1890, and became Centre for Agro - based Industry in 2012	Address	: Jl. Ir. H. Juanda No. 11, Bogor 16122 Jawa Barat
Staff	: 204 staffs, including 48 experts and technicians	Phone	: +62 251 8324068
Budget	: USD 4.218 million (2016)	Fax	: +62 251 8323339
Location	: Bogor, Indonesia	Web	: www.bbia.go.id
Geo Coordinate	: -6.602723, 106.797540	Email	: cabi@bbia.go.id

both academically and commercially in industrial communities.

Research and Development. The technological know-how, which is the output of its research and development (R&D), is aimed at contributing to the growth of the agro-industry. Among the results of its researches that have been tested and utilized include: products of carotenoids which has the advantage of being water-soluble Pro-Vit A; analogous meat products which serve as an alternative food for vegetarians with an added value of a meat substitute that is highly nutritious and has low fat; mocaf (modified cassava) starter products which have an advantage of a shorter fermentation time; and biomass power plant which uses agricultural waste and municipal solid waste to produce low-cost fuel and electricity.

In 2015, CABI established a project called Science Techno Park (STP). The objectives are: 1) to deliver its research result to the industries, especially Small and Medium Enterprises (SMEs); 2) to give SMEs an opportunity to develop and innovate their product by using resources available in STP. Five research locus available in CABI's STP are desiccated coconut, mocaf, pellet, cacao processing and cacao product diversification, and smoked fish processing.

Patented product. To protect the technological know-how it has developed through its R&D, CABI already patented four of its products. The products are: Production of granules of *Acetobacter Xylinum* from granulation culture results; tincture extracts from Binahong plant; Production of supplement powder for breastfeeding mothers from Bangun- Bangun herbs; and Production of margarine from extracted oil of patin catfish.

Publication. Research results and services were documented for publication as well as for dissemination. In the past ten years, CABI had produced 100 scientific

papers for both national and international publications. CABI itself also publishes a scientific journal, *Warta IHP-Journal of Agro-based Industry*, and it has been accredited by the Indonesia Institute of Science in 2016.

Training. CABI organizes training programs as an annual agenda, as well as training programs requested by agro-industrial companies. Annually-planned training programs are provided through 15 different topics and 25 schedules to choose from. At present, the centre has trained 5,000 participants, mostly from the agro-industry.

Technical Consultation. Consultation offers scheduled assistance within a relatively long duration of time. In the last 10 years, CABI had given 100 consultations especially to the SMEs. The consultation includes the implementation of ISO 17025 to technical assistance in product development. The service has benefitted more than 3,000 people since it started.

Awards. CABI has received recognition and appreciation for its work and services rendered. Two of the important awards received are: Best Public Service Award from the Ministry of Industry in 2006 and Excellent Service Award from the Ministry of State Apparatus and Bureaucracy Reform in 2006. CABI also received the Centre of Excellence Award from the Ministry of Research, Technology and Higher Education in 2016.

International Cooperation

International cooperation undertaken was mainly to share knowledge and experiences, as well as improve the quality of research and services. CABI has forged international cooperation with partner institutions, such as: KITECH (Korean Institute of Industrial Technology); RIKILT (Institute of Food Safety Netherlands); M&K Laboratories Inc. Japan; AINIA Centro Tecnológico, Spain; and Trade Support Program II, European Union.

Area of Expertise : Industrial Agro Engineering.

Strength and Achievements : Agro-based relevant to local resources.

- 100 Scientific papers;
- 4 patent Products;
- 5,000 trained;
- 3,000 beneficiary.

International Cooperation Program : (a) KITECH (Korean Institute of Industrial Technology), (b) RIKILT (Institute of Food Safety Netherlands); (c) M&K Laboratories Inc. Japan; (d) AINIA Centro Tecnológico, Spain; and (e) Trade Support Program II, European Union.



Trade



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik Bali

Balai Besar Pendidikan dan Pelatihan Ekspor Indonesia (BBPPEI)

[Indonesia Export Training Center, IETC]. Jakarta



Introduction

The Indonesian Export Training Centre (IETC) is an education and training institution with a focus on export trading, housed under the Directorate General of National Exports Development (DG NED), Ministry of Trade. IETC was founded in 1990 in response to Indonesia's steadily increasing trade, as well as demand for knowledge and skills in the import-export business among entrepreneurs. It is mandated to organize and to coordinate educational and training programs in exports for the business community and the general public.

IETC is currently supported by 80 personnel, with 9 internal facilitators. Training facilitators are sourced from the Ministry of Trade while 180 external facilitators are practitioners in export-related businesses. The purpose of involving practitioners as trainers is to provide participants with practical knowledge in export trading. As a government institution, the centre is state-funded, with a budget of USD 2.25 million (in 2016).

Main Activities

IETC is a training institute which focuses on export trading. IETC also provides support for local/national entrepreneurs in expanding the scope of their businesses through exporting.

IETC's main activities are: education, training, consultation and assistance. IETC offers several educational programs, including a two-month comprehensive training in export and import. Training programs include practice and apprenticeship in the processing of trade documents and to perform simulations of export and import trading. Some training programs will take 2 weeks, while some are shorter – completing in 3–7 days. Furthermore, consultations and post-training assistance are usually provided to guide entrepreneurs in production and marketing.

Areas of Expertise

IETC's expertise is in the provision of educational and training programs in trade (import-export). However, the centre gives more attention to the



Established : 1990
Staff : 80 personnel with 9 internal facilitators
Budget : USD.2.25 million (2016)
Location : Jakarta, Indonesia
Geo Coordinate : -6.172829, 106.791119

Address : Jl. Letjen S. Parman 112 Grogol Jakarta
Phone : +62 21 5666732, 5663309, 5674229
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Email : promosi.ppei@kemendag.go.id

export sector, to encourage small businesses to become more export oriented. IETC provides training in four areas which reflect the centre's competencies and expertise. These are: the development of export strategies; preparation in export trading; negotiation in export trading and export support. In each area, there are several topics which the participants could choose from, as per suitability or need.

IETC also offers consultation services in the form of mentoring and coaching. Mentoring is provided to support the ones trained by IETC, to enhance their export capabilities; and coaching is provided to support qualified owners of SMEs who already have knowledge in exporting, or are an exporter.

Achievements

Training. IETC, as a training institution, provides a wide scope of training programs. Since 1009, 67,391 trainees have completed its programs. These successful trainees are engaged in various businesses all over Indonesia.

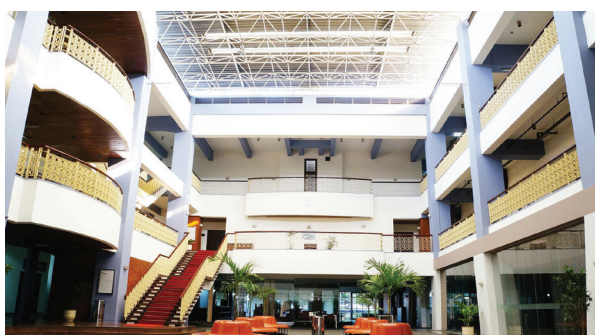
Consultation and Coaching Program. Consultation and assistance are given during the post-training mentoring sessions. During these sessions, IETC facilitators provide assistance and addresses the trainees' concerns in relation to the business; as well as new ventures. By providing consultancy and assistance, the IETC has generated 89 new businesses engaged in exporting within the period of 2012 and 2016.

Programs and Modules. IETC has succeeded in developing and providing programs and modules for topics in demand. Thus far, IETC has managed to put together 68 training modules and module topics.

Awards. The success of IETC has been widely recognized and acknowledged by the government and the business world. Some of the awards received by IETC are: Citra Pelayanan Prima Award (Service Excellence) in 2008 and BNSP Competence Award in 2009.

International Cooperation

International cooperation is a necessity considering that IETC is specializing in export trade. International cooperation is carried out in relation to the need to expand networks. Collaborations are established mainly with international trade organizations and also with institutions that are interested in improving the different aspects in conducting businesses. Some collaborations undertaken by IETC are: TFO-Canada, JICA-Japan, CBI-Netherlands and TPSA-CBOC Canada.



Area of Expertise : Education and training in trade.

Strength and Achievements :

Export-Import Simulation; Custom Internship.

- 67,391 trained (2006–2016);
- 89 new businesses for export (2012–2016);
- 52% participants are SME.

International Cooperation Program :

Collaborations are among others with: TFO-Canada, JICA-Japan, CBI-Netherland and TPSA-CBOC Canada.



Disaster Risk Reduction and Mitigation



MAPPING INDONESIA'S RESOURCE CENTERS

Promoting Reverse Linkage for the South-South
and Triangular Cooperation

Batik
Yogyakarta

Tsunami and Disaster Mitigation Research Center (TDMRC). Banda Aceh



Introduction

Tsunami and Disaster Mitigation Research Centre (TDMRC) is an institution for disaster research under the University of Syiah Kuala, Aceh Province. TDMRC was established after a major earthquake and tsunami devastated Aceh in December 2004.

The objectives of TDMRC are two-fold. First, to increase the availability of qualified resources in disaster research, which will serve as inputs to the government in policy making. Second, to collect and provide the best available data, by accelerating proper data collection process related to the disaster impacts.

As a research institute located within a university, the TDMRC is supported by excellent human resources and experts. TDMRC has 55 staff, including 40 experts and technical personnel. Likewise, it has a budget of USD 185 thousand in 2015 for its management activities and office administration expenses.

Main Activities

TDMRC is focused in the field of disaster management and mitigation. As a research institution, the centre's main activity is to conduct applied research in disaster mitigation. Other activities are an extension of its research activities, which include the provision of: public service in capacity building through education, training and advocacy; and data and information services.

In order to efficiently manage these activities, TDMRC's management has created the following divisions: applied research, education, training and advocacy and knowledge management.

Areas of Expertise

TDMRC's area of expertise is on disaster mitigation, with a special emphasis on research related to tsunami, geohazard and human security. Some of the researches conducted by the TDMRC are as follows:

- Population Data Development for Evacuation Simulation in Meuraxa Sub-district; a collaborative research, with JST-JICA, 2009–2011;



Established : 2006
Staff : 55 staffs; including 40 experts & technical staffs
Budget : USD.185 Thousands
Location : Banda Aceh, Indonesia
Geo Coordinate : 5.570912, 95.369547

Address : Jl. Prof. Ibrahim Hasan, Ulee Lheule, Meuraxa, Banda Aceh, 23232
Phone : +62 651 8052168
Fax : +62 651 8052009
Web : tdmrc.unsyiah.ac.id
Email : office@tdmrc.org

- Impact of Rehabilitation and Reconstruction on Post Tsunami Community on Socio-economic Conditions in Meuraxa Sub-district; a collaborative research with Nagoya University, Japan, 2006–2010;
- Pilot Project on Risk Management of Floods at Selected Rivers in Aceh Province; a collaboration with Sea Defense Consultancy and other participating institutions, 2006–2009.

Achievements

TDMRC's progress and achievements are reflected in the results of its activities.

Research. TDMRC has conducted 25 researches in tsunami and disaster mitigation. Findings in these researches are disseminated through the holding of events and in the publishing of books and articles. Thus far, TDMRC researchers have published 50 articles/papers in national and international journals and other types of publications.

Education and Training. TDMRC has conducted many disaster-related training programs. The purpose of conducting these training programs is to raise awareness in both local and global communities on disaster mitigation.

International Cooperation

The development of TDMRC provided more opportunities for cooperation during the post-disaster recovery period (post-earthquake and tsunami-hit Aceh, December 2004). Currently, TDMRC has developed a broader and better international cooperation through its collaboration with University of Syiah Kuala. More than 10 international MoUs were signed for disaster-related activities. Aside from the cooperation with the University of Syiah Kuala, collaborative activities which are in progress are:

- Nagoya University Japan for the Assessment of Impact of Rehabilitation and Reconstruction on Post Tsunami Community on Socioeconomic Conditions in Meuraxa Sub-District" (2006–2010);
- JICA-JIST in Project of Population Data Development for Evacuation Simulation in Meuraxa Sub District" (2009–2011);
- International Centre for Water Hazard and Risk Management (ICHARM), Flood Risk Management and Assessment;
- Canada–Sri Lanka Consortium for Post Tsunami Restoration (CSUC-PTR), Joint Paper Publication.



Area of Expertise : Research in tsunami and disaster mitigation.

Strength and Achievements : Located right in the center of tsunami disaster; research based on the experience:

- 40 experts;
- 50 academic papers;
- 25 relevant research.

International Cooperation Program : More than 10 international MOUs were signed for disaster related activities.



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Appendix 1

Criteria and Indicator for Short List of RC

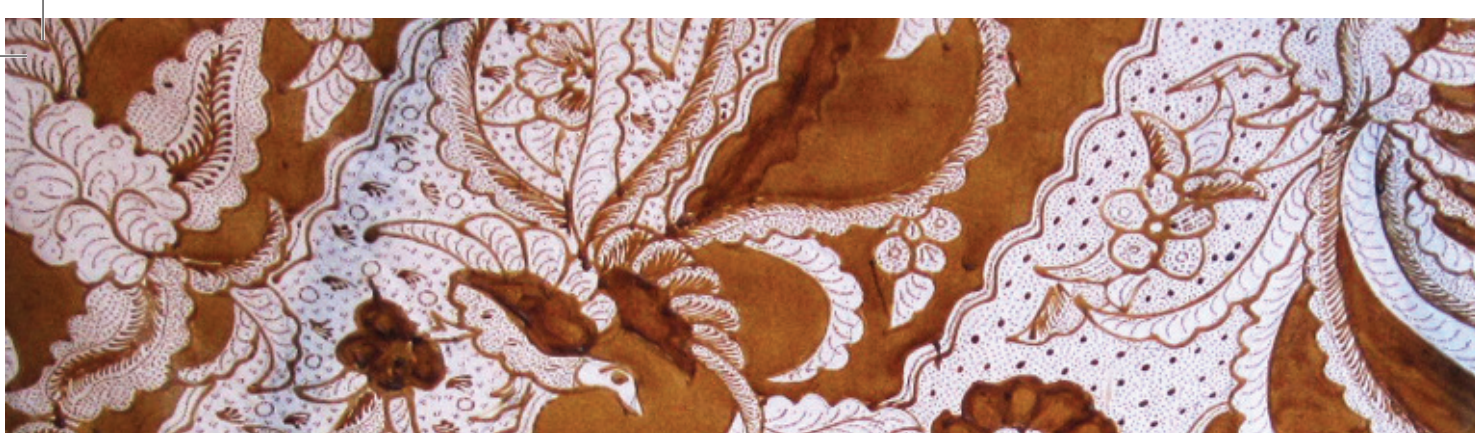
For the purpose of RC selection, the criteria are described in detail; in the form of measurable indicators. There are 19 variables/indicators which are defined and measured as follows:

Definition of Variable/Indicators:

No	Variable/Indicators	Definition
1.	Variable/Indicator-1 Name Definition Measure	: Establishment : Length of time RC operates and to function as it is today. Time is counted since it was created as the current function. : Year
2.	Variable/Indicator-2 Name Definition Measure	: Expertise : RC expertise that in line with Indonesia SSTC priority : Number
3.	Variable/Indicator-3 Name Definition Measure	: Number of Staff : The number of staff which is owned by RC : Number
4.	Variable/Indicator-4 Name Definition Measure	: Technical Staff : Ratio of technical staff compared to management staff : Proportion (%)
5.	Variable/Indicator-5 Name Definition Measure	: Total Budget : Total budget in a year owned by RC. Budget refers to FY.2015 : IDR
6.	Variable/Indicator-6 Name Definition Measure	: Budget for program : Ratio of budget allocated for program compared to budget allocated for administration. : Proportion (%)
7.	Variable/Indicator-7 Name Definition Measure	: Fund sources : The total number of funding sources. Sources may be government, private sector (commercial), independent source, donor etc. : Number



No	Variable/Indicators	Definition
8.	Variable/Indicator-8 Name Definition Measure	: Independent Funding : Funding comes from RC own income. For the government institutions, this may be a non-taxed revenue. : yes/no (1/0)
9.	Variable/Indicator-9 Name Definition Measure	: Funding from Private Sector : Identification whether RC has funding from private sector. : yes/no (1/0)
10.	Variable/Indicator-10 Name Definition Measure	: National Achievements : Outputs produced by RC in accordance to their expertise. Outputs are for national level. : Number/score
11.	Variable/Indicator-11 Name Definition Measure	: National Awards : Number of National Awards obtained by the RC in the past 10 years. : Number
12.	Variable/Indicator-12 Name Definition Measure	: International Awards : Number of International Awards obtained by the RC in the past 10 years. : Number
13.	Variable/Indicator-13 Name Definition Measure	: Staff for International Cooperation : Number of staff assigned to deal with international cooperation : Number/score
14.	Variable/Indicator-14 Name Definition Measure	: Budget for International Cooperation : Budget allocated for international cooperation or related international program. : IDR



No	Variable/Indicators	Definition
15.	Variable/Indicator-15 Name Definition Measure	: International Achievements : Outputs produced by RC in accordance to their expertise. Outputs are for international level. : Number/Score
16.	Variable/Indicator-16 Name Definition	: Countries in cooperation : The number of countries in the international cooperation (international experience) over the last 10 years. Countries means The countries being visited or the countries come to visit.
17.	Variable/Indicator-17 Name Definition Measure	: International Agreements : The number of agreements that RC has. Agreements means MOU, partnership, or other related agreements : Number
18.	Variable/Indicator-18 Name Definition Measure	: Contribution in International cooperation Project : Contribution made by the RC in the international cooperation project (provided the international project is a joint project). Contribution is calculated as proportion of the project value. : Proportion (%)
19.	Variable/Indicator-19 Name Definition Measure	: Leveraged funds from International Cooperation Project : Fund that RC obtain from development partner (in the international cooperation project). : Proportion (%)

Appendix 2

SSTC Policy on National Medium-Term Development Plan

South-South and Triangular Cooperation (SSTC) is an important aspect in supporting and strengthening development cooperation among developing countries. Since Indonesia has succeeded in maintaining sustainable economic growth, Indonesia becomes one of the important actors in regional and global developments. With a vision for “Better Partnership for Prosperity”, it is the SSTC’s mission to [1] promote partnership; [2] enhance development cooperation, including economic cooperation; and [3] increase national solidarity by harnessing the potential of each country, for common benefit.

Recently, the leadership and role of Indonesia in international development cooperation among South-South countries have been reemphasized. The National Medium Term Development Plan (RPJMN) 2015–2019 has revealed that it is Indonesia’s directive to further commit and strengthen its role in the global and regional fora in order to develop mutual cooperation.



Figure 1: Policy Direction, Strategy and Goal of SSTC

Funding Framework. Funding framework is aimed at strengthening the funding mechanism as well as optimizing the sources of funding, optimization of funding sources. One of SSTC’s sources of funding could be from projects with other development partners. In this partnership, the Indonesian government could contribute in the form of: (I) cash, (II) equipment, and (III) expertise (technical assistance).

Regulatory Framework. Regulatory framework is intended to provide a legal basis for the implementation of the SSTC program budget, and provide clear and accountable directives in terms of financing mechanisms. For international cooperation, particularly SSTC, for any grant granted by the government of Indonesia to other foreign nations, regulations for the disbursement or usage of the grant are required to be drafted.

Institutional Framework. Institutional strengthening aimed at improving coordination towards a “one gate policy” of SSTC implementation. The strengthening could be implemented through: (I) improvements in the working procedure of National Coordination Team, (II) capacity enhancement of human resource in Indonesia’s SSTC, and (III) involvement of the role of local government, private sector and other development partners to ensure effective implementation of the SSTC.



MAPPING INDONESIA'S RESOURCE CENTERS

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