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**Australian Centre for  
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# Final report

## Scoping study on impacts and policy implication of plausible futures for Indonesia and Australia

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## 1 Acknowledgments

The authors wish to thank ACIAR for funding for this scoping mission.

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## 2 Executive summary

The ACIAR Director Peter Core and the International Food Policy Research Institute (IFPRI), mainly Mark W. Rosegrant, Director, Environment and Production Technology Division (EPTD), discussed the need for an Indonesian agricultural policy review to identify areas requiring assistance with quality policy analysis. In particular, policy focused on maintaining sustainable economic growth in the face of growing global economic and environmental pressures. A number of studies (discussed below), have identified a lack of capacity in quality policy analysis as it relates to global change. Information and adaptive capacity on the appropriate policies for natural resource management, the strengthening of agricultural production and market activities, and the research and development essential to build the Indonesian economy are not well known. Given these limitations at the national level, strengthening the capacity of Indonesian policy analysis to examine these important issues within independent and transparent institutions, would lead to substantial benefits.

The absence of regular reviews of policy settings in key countries of interest like Indonesia was discussed during the Centre of International Economics (CIE) review of ACIAR policy projects. Likewise, the Policy Linkages and Impact Assessment Program (PLIA) showed an interest in examination and evaluation of Indonesia's agricultural policies as it relates to technical project impacts. As a response to this need, a three-month "Scoping Study on Impacts and Policy Implication of Plausible Futures for Indonesia and Australia" was conducted by IFPRI and ACIAR. The team went on a brief mission to Indonesia in August 2007. This mission aimed to re-visit and re-confirm IFPRI's and ACIAR's commitments to the Indonesian government by extending full support and sharing expertise to strengthen the capacity and skills of national partners.

The mission met with Indonesian partners and discussed the details of the concept note, reaching a strong commitment and agreement on the proposed activities and timelines of a full research project. Possible Indonesian partners were identified and steps to move forward were deliberated and agreed upon, including revision of the research proposal to incorporate suggested items drawn from the meetings. These included methodological tools (short and long term, economy-wide) open for separate funding of side issues, ICASEPS resources, benefits of each partner including the donor agency, and the role and responsibility of each institution with clear boundaries of work to avoid overloading any particular partner.

The full research proposal entitled "Plausible futures for economic development and structural adjustment in Indonesia – impacts and policy implications for the Asia-Pacific region" has been submitted separately.

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## 3 Introduction

In the face of growing global economic and environmental pressures, it is necessary to ensure the capacity of policy to maintain sustainable economic growth. After discussions between Peter Core of ACIAR, and Mark W. Rosegrant of IFPRI, a need for a review of Indonesian agricultural policy was ascertained to identify areas requiring assistance with policy analysis. Previous studies such as the IFPRI agriculture and rural development

strategy<sup>1</sup> and the Australian National University (ANU) study on strategic trade policy<sup>2</sup>, have identified a lack of capacity in quality policy analysis as it relates to global change. Information and adaptive capacity on the appropriate policies for natural resource management, strengthening of agricultural production and market activities, and research and development essential to build the Indonesian economy are not well known. Given these limitations at the national level, strengthening the capacity of Indonesian policy analysis to examine these important issues within independent and transparent institutions, would lead to substantial benefits.

Australian institutions like the Productivity Commission (PC) and Australian Bureau of Agricultural and Resource Economics (ABARE) have existing expertise and wide experience in trade liberalization, agricultural policies, structural adjustment and improvements in agricultural productivity including collection of information for estimating cost of production pricing that have led to substantial benefits to the Australian economy. These two institutions have undertaken highly relevant Trade Policy Reviews including Indonesia which is similar to country reviews carried out by the Organization for Economic Cooperation and Development (OECD). However, the absence of regular reviews of this nature, ie. policy settings in countries of interest like Indonesia, was discussed during the Centre of International Economics (CIE) review of ACIAR policy projects. Likewise, the Policy Linkages and Impact Assessment Program (PLIA) showed an interest in examination and evaluation of Indonesia's agricultural policies as it relates to technical project impacts.

As a response to this need, a brief mission to Indonesia by IFPRI and ACIAR was conducted from August 12-17, 2007. This mission aimed to re-visit and re-confirm IFPRI's and ACIAR's commitments to the Indonesian government by extending full support and sharing expertise to strengthen the capacity and skills of national partners. These capacity and skills include:

- agricultural and policy processes
- agriculture's position in the economy and rural development of Indonesia
- ability to identify and analyze areas requiring assistance on quality policy analysis
- present alternative policy options (e.g. in relation to adjustment) with positive impacts on income, poverty and hunger in the longer term.

The mission met and discussed the details of the concept note with Indonesian partners, and reached an agreement on the proposed activities, outputs and timelines of a full research project. Possible Indonesian partners were identified, achieving the second of the study's two outputs:

- full research proposal based on discussion with partners
- identification and commitment of partners – Australia, Indonesia and other interested organizations as necessary.

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## 4 Discussion of the Proposed Research Proposal

IFPRI (represented by Dr Mark W Rosegrant) ANU (represented by Dr Ray Trewin) and ACIAR, (represented by Dr Simon Hearn), visited Indonesia to present and conduct an in-depth discussion with potential partners on the proposed research project entitled "Plausible futures for economic development and structural adjustment in Indonesia – impacts and policy implications for the Asia-Pacific region".

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<sup>1</sup>Funded by the Asian Development Bank (ADB) and implemented with the Indonesian Center for Agro Socio-Economics and Policy Studies (ICASEPS) and the Australian National University (ANU)

<sup>2</sup> With University of Adelaide (UA) assisted by the Indonesian Ministry of Trade (MoT) through training

A number of meetings were held throughout the duration of the Indonesia trip, from August 13-16, 2007.

### ***ICASEPS, MOA - Indonesian Center for Agriculture Socio-Economics and Policy Studies, Ministry of Agriculture***

A meeting was held with the director of ICASEPS, Dr Tahlim Sudaryanto and other staff namely, Drs Wahida, Budiman Hutabarat, Reithmuller, Sahat Parasibu, Reni and Erna Maria Lokollo. Dr Rosegrant initially discussed the past project on agriculture and rural development strategy financed by ADB and conducted with ICASEPS and ANU, followed by an overview of the plausible futures proposal. In his introduction, he emphasized the proposal's intention to integrate analysis and policy dialogue, which will require modalities of how to work across Ministries. There is a need for a long-term framework in conjunction with analysis of short-term impacts of policies (e.g. rice, estate crops, cocoa tax, [regional] trade). Though models will provide micro detail on Indonesia, the regional aspects are likewise important.

Dr Tahlim commented that the proposal is interesting and challenging. The rest of his team agreed and found the proposal ambitious. However they recognize the need for this kind of research on plausible futures in Indonesia. Further, they acknowledge the lack of coordination and proper implementation of policies that include the role of the private sector. Thus the framework is important as it will define the role of each agency including other actors like the private sector.

Furthermore, the food security/self-sufficiency and poverty links are important. The capacity to produce food is declining and becoming more volatile. Trade offers a supply side-solution as evident in the 2025 long-term plan and Dr Kadin's work on various sectors till 2030. On the other hand, proper accounting has not been taken of energy/bio-fuels, climate change, and bio-technology. Policies are limited to marginal areas for bio-fuel crops and while there have been some GM field trials, they have not commercialized (with the exception of the unsuccessful cotton trial). The Trade Ministry has a different view, the private sector (e.g. supermarkets) is putting on pressure for the uptake, and the Bio-safety Commission is composed of high level officials with technical backup from scientists who are pro-GM.

Apparently, the biggest constraint is not inter-agency (e.g. the Trade Committee meets every week) although ACIAR promotes inter-agency collaboration. Dr Tahlim is interested in capacity building, including John Allwright Fellowship (JAFs) and training that will be conducted within the project. Benefits of this nature are in the assessment of agricultural research center funding during the development of the IMPACT (International Model for Policy Analysis of Agricultural Commodities and Trade) project.

Dr Rosegrant elaborated that there will be a series of outputs coming from the IMPACT model. The IMPACT model is updated and more integrated with an Indonesian module but it is essential to conduct independent work to obtain parameters (like the Australia big egg production system shock). Integration will take place through steering committees. Dr Tahlim is on the Tariff Team; except that most of the time, the full 'Team' is not brought together. An expanded draft of the proposal, including key analytical areas, will be circulated to potential organizations during the start of 2008. Note that during the implementation process, MoT will be the key proponent with others like IPB on contracts. Dr Hearn highlights that ACIAR encourages partnerships, viability, outcomes and impacts of the proposed research study.

### ***Meeting with IPB – Institut Pertanian Bogor or Bogor Agricultural University***

The team also met with IPB staff, Dr Rina Oktaviani, Head, Department of Economics and Ms Nunung Nuryartona, Secretary. Dr Oktaviani mentioned that Sahara got a JAF from ANU and Ecce is going to Adelaide.

Dr Oktaviani discussed the range of relevant work she had done with CGE models such as the competition policy, regional ORANI-style CGE used in Warr's technology and poverty project, DoI tax on value added, and workshops conducted on other country comparisons. Likewise, she gave some insights on her collaborative work with a number of government and non-government agencies such as:

- Bappenas (Badan Perencanaan dan Pembangunan Nasional or National Development Planning Agency) regional planning including private/government investment, covering 10 provinces and using BPS data on regional I-O tables
- Ministry of Agriculture on the WTO agreement (domestic support, export taxes etc); the impact of AFTA on agriculture; the CCF project on ASEAN economic integration; and AI national impact on tourism etc
- Randy on trade and the environment
- ACIAR coconuts project
- ADB on education

Dr Oktaviani co-authored a Chapter with Dr Erwidodo on shrimp export ban to be published by the Cambridge University Press.

The President called for agricultural revitalization but nothing came out of it over the subsequent two years. Urban-rural migration remains an issue, like the Manning research. Non-farm occupation makes up 60% of rural income. Fertiliser subsidy is mainly through fertilizer producers' input prices. IPB could be involved along the lines of ABARE's involvement in the research on plausible futures but more of an in-country component. Three other staff in IPB are doing CGE analysis, although there are limited outsiders including Dr Arieff in the Ministry of Forestry, Dr Anggito ex-Gadja Mada, and Dr Tubagus of IMF. They have run some coordination seminars and ADB training.

### ***Meeting in IAHHI - Indonesian Agroclimate and Hydrology Research Institute (part of IAARD, Indonesian Agency for Agricultural Research and Development)***

Dr Kasdi Subagyo, Head of IAHHI and 5 other staff participated in the discussion. Dr Kasdi, who was moving the following day, gave a formal presentation on the overview of IAHHI with particular reference to the research studies conducted by the Institute. This includes forecasting of water availability but was not clear up to what level (Kalman filtering). Indonesia was sub-divided into five regions using the global model. IAHHI collaborated with IRRI and agencies like CASEPS where the Institute was the main agency responsible on research issues. They are also involved in working groups in collaboration with universities on specific issues. Because of their wide range of collaboration, Dr Rosegrant got an impression that IAHHI has access to more information. Moreover, IAHHI has access to regional institutes to obtain information from farmers, which is important in conducting the proposed research on plausible futures.

During the discussion of collaborators (potential partners include the Adelaide post-doc on climate change and trade, CGE etc), ABARE brought in aspects like bio-fuels for which a separate funding was obtained. The proposed project can capture the large number of diverse interests through steering committees and other similar activities. From the Australia partners, they need to check previous CCF proposal, coordination of AI, or environmental links (Tom Kompas ANU/ABARE).

### ***Meeting with AMARTA (Agribusiness Market and Support Activity, a USAID supported project for the Government of Indonesia) =***

The team met with Dr Rich Magnani, acting head for Dr David Anderson, who is currently at DAI Headquarters in Washington, DC, USA. Other AMARTA staff like Drs Pantjar Simatupang and Sjaiful Bahri joined the meeting. There are six projects on environment, agribusiness value chains (coffee, fisheries, livestock), non-agricultural value chains, IT,

AI, and disasters being carried out by AMARTA with a span of three years at US\$14m. They have linkage to commercial corporations like cocoa, and regional agribusiness alliances like Pantjar with oranges, as well as the World Bank on long term activities like policy analysis training and new institutions. They focus on issues like empowerment. The DAI website (<http://www.dai.com/about/>) provides examples of where this has worked, for example Egypt gains from this change. Some long-term aspects is problematic (e.g. resource depletion due to infrastructure is an issue, as is the cost of smallholders' access to technology) but basically complements ACIAR's role.

### ***Meeting with the Agency for Trade Research and Development (TREDA), Ministry of Trade (MoT)***

The team had a quick meeting with the Minister of Trade, Dr Mari Pangestu as she was on her way to meet with Dr Ross Garnaut, Chair, Board of Trustees of IFPRI, on climate change and trade policy.

The team then met with Dr Erwidodo, Head of TREDA and Dr Andin Hadiyanto who works in the Business Climate Center, with some CGE experience and linkage with Dr David Vanzetti. Dr Erwidodo gave an overview of the agency with 186 staff including support with 40-50% researchers, 3 research centres on foreign trade, domestic trade (includes retail such as 711's), and business climate; one data centre and a Secretariat. There are about 25-30 staff in each centre. They tried to form a trade and investment research centre but most went to Industry which is bigger. There is a need to strengthen capacity of staff which is the Minister's objective. Parliamentary hearings on analysis passed IPB. The research pool is being intensified with the return of one PhD and six new Masters. TREDA is moving in the direction of an in-house CGE capacity as they need to communicate with outside experts and established models (e.g. Wayang, Indorani).

The TREDA team discussed their interest in the Australia-Indonesia FTA, as they are involved in the joint study group and had discussed this during their meeting with Dr Garnaut and former Environment Minister Emil Salim, on climate change. However the team is not sure if consultants had been contracted for the modelling. Dr Trewin mentioned Dr David Vanzetti's modelling work in Indonesia at the Crossroads. This work was carried out with Dr Greg which could be extended from other funding sources (e.g. ANU environmental hub to analyse the environment and technology issues). In September the team will work on commodities where there is a joint interest in trade liberalization. Indonesia is an agrarian country thus trade will have an agricultural focus (check on the damage Lester Brown's advice on agricultural self-sufficiency did to China in the longer term through poor infrastructure investment etc). Dr Erwidodo explained that Australia wanted the government involvement but not the private sector. However Australia's interest in the FTA has grown as WTO/ASEAN slowed, finishing Malaysian FTA, etc. The project would be complementary to this research proposal (e.g. developing useful tools).

Price stabilization has been a big issue. The future is less stable unless investments in agricultural technologies, climate change impacts, globalization on trade, and others are undertaken. Drought is currently impacting on exports. Export targets are likely to be affected. A priority (future) issue would be standards which are agriculturally related. There is a need for a policy paper on moving from low to high quality, market vs regulatory approaches (one can never inspect quality - requires incentives). Other issues include investment, technology transfer, and policy on environmental processes (which Australia is pushing). Information on various commodities were provided.

Dr Rosegrant then gave an overview of the proposal highlighting the inter-collaboration across Ministries. Dr Erwidodo has an advantage being able to work with both main collaborators through outsourced projects (e.g. with CSIS, IPB, UI), and alternative futures due to climate change, bio-energy etc. A linked modelling framework would be followed including CGE models (especially on the trade component). The IFPRI-IMPACT model

has moved beyond its previous version (e.g. includes water), while a PE model is under development. A draft proposal will be shared and circulated through Andin and Erwidodo.

### ***Meeting with IAARD (Indonesian Agency for Agricultural Research and Development)***

The scoping study team met with Dr Achmad Suryana, Director General and Dr Widi Hardjono, Head, Science and Technology, both from IAARD. Dr Achmad found the research proposal interesting and requested further details like duration, methodology, and activities. He likewise commented that the ADB report was acceptable as this was not too pro-trade. It will be beneficial to involve the MoA/MoT steering committees to expound on hot issues like food security/self-sufficiency (rice, corn, soybean, sugar, livestock) and estate crops, where palm oil is an important cooking material. Horticulture is more of a free market as it is not considered a staple. There is also a number of policy actions (e.g. palm oil, rice, fertiliser, rice seed etc) including a policy brief to the Minister advising not to subsidize seed, although this was not followed. Free seed policy is production, not poverty oriented. Supposedly pro-people policies are being introduced but these are not really helping<sup>3</sup>. These might appear good in the short-term but are costly in the longer-term (the methodology will pick this up, as well as the economy-wide effects). A policy assessment will be conducted in 2009 and research on the best way for self-sufficiency will be useful. Dr Achmad did not support IAHRI as the best agency for climate change information rather it is the land and resources. Copies of publications on the agency were provided.

### ***Meeting with Pelangi (NGO)***

The team met with Ms. Moekti Handajani Soejachmoen, Deputy Executive Director of Pelangi. Pelangi is an NGO and a think-tank on climate change, energy resources as well as transportation and air quality based in Jakarta. A copy of a brochure about the agency was provided. Examples of the material slogans are “Climate change impacts on Poverty but Development causes Climate change thus Development causes Poverty?” Two economists are on the staff list. They were formed as an NGO with the first Environment Minister and are involved in aspects related to the Kyoto Carbon credit scheme.

### ***Meeting with other interested research groups***

The team likewise met with other research groups like Dr David Parsons, Dr Greg McGuire and Dr Sam Laird who are all working in Indonesia on a project organized by Dr McGuire on WTO research (but different to Martin Roy et al), and Dr Hearn. A CD of the Kadin forecasting exercise was sent by Dr Parsons.

### ***IFPRI Seminar on Climate Policy – Pro-Poor Mitigation through Carbon Trading***

Aside from the numerous meetings carried out, Dr Rosegrant gave a seminar on “Climate Policy – Pro-poor Mitigation through Carbon Trading”. The seminar was conducted to gain an exchange of views and knowledge among colleagues on climate change policies and how these influence the rural poor. The main points consisted of emission savings worth double development assistance; forestry on low cost savings; and to help the poor needs an effective integration into the system through more information, lower transaction costs and greater scale. Research questions revolved around these aspects and the impacts of carbon trading on food security. There were questions/comments on how countries like Indonesia with more poor and bio-diversity can avoid losing out to China with greater investment and that a per capita basis can be inequitable for large sparsely populated countries like Australia. Dr Trewin also had a chance to meet Dr Sahat Pasaribu of ICASEPS after the seminar.

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<sup>3</sup> cf Warr rice analysis



### ***Meeting with the DG of Quarantine***

Dr Delima, Director General of Quarantine, discussed that the real players (e.g. processors/exporters) need to be taken into account in the proposed research project. The long-term effects will also be important. Standards are a key issue and may be easier to address through FTAs rather than the WTO, especially with countries of the same standards. Sugar policy is an important issue. Independent analysis of fertilizer policy will be more meaningful when this policy needs to be considered in 2009. Dr Delima mentioned that livestock was impacted significantly by climate change. Dr Trewin will send a redraft of the proposal for her comments.

### ***Meeting with United Nations Support Facility for Indonesia Recovery***

The scoping study team met with Dr Greg McGuire. Dr Trewin discussed with Dr Rosegrant the complementarities between the project and this multi-lateral bid. Dr McGuire provided some background on Indonesia's needs, the TAMF program and his experience including in Indonesia.

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## **5 Potential Partners**

A number of organisations were identified as potential partners during this trip:

- ICASEPS – Drs Tahlim, Wahida, Budiman Hutabarat, Reithmuller, Reni and Erna Maria Lokollo
- IPB – Dr Rina Oktaviani and Nunung Nuryartona
- IAHRI – Dr Kasdi Subagyono
- AMARTA – Drs Rich Magnani, Pantjar Simatupang and Sjaiful Bahri
- TREDATA – Drs Mari Pangestu, Erwidodo Andin Hadiyanto
- IAARD – Drs Achmad Suryana, Widi Hardjono
- Pelangi - Ms Moekti Handajani Soejachmoen
- Quarantine, MoA – Dr Delima
- Other research group - Drs David Parsons, Greg McGuire and Sam Laird

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## **6 Conclusions and recommendations**

IFPRI, ANU, ACIAR and ICASEPS staff carried out an in-depth discussion of the proposal focusing on the following points:

- A redrafted outline of the research proposal incorporating items suggested during this trip is due by the end of month
- Phase1/2 – referees (e.g. Dave Vincent)
- The proposal should commence by the first semester of 2008
- Need to focus and define the main issues
- Methodological tools (short and long term, economy-wide) open for separate funding of side issues targeting AARES, IAAE, or Crawford Fund
- ICASEPS resources – Budiman and others to focus on lower resources such as Rennie plus JAF

- Steering Committees should not be too big (less than 8 experts), involving senior people with access to decision makers and broad interests (e.g. environment, and coordinating Ministry, Bappenas)
- Australian benefits in the proposal include the climate change aspects like IFPRI's presentation plus trade to Indonesia, SPS etc
- Role and responsibility of each institution discussed with clear boundaries of work to avoid work overloading to any particular partner.

A separate wrap-up meeting was held with Dr Hearn focusing more on bio-fuels research, the need for an over-viewing economic framework and the interest of Dr David Vanzetti in this. The scoping mission confirmed the relevance and importance of the proposed research project, and provided valuable inputs into the development of the full proposal.