JOINT RESEARCH PROJECTS SPIN 2012-2016

**Part I:** Joint Research Projects

1. **Title of the Joint Research Programme**
   
   Social and economic effects of partnering for sustainable change in agricultural commodity chains; A Southern perspective

2. **Applicants**
   
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   **d. Additional project partners in Indonesia (minimum of one)**
   
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3. Summary of the Joint Research Project Proposal (Max. 800 words)  

Indonesian actors have become intensively involved in many global certifying partnerships that connect Southern production to Northern consumption. These partnerships aim to promote the sustainable production of agricultural commodities and are expected to simultaneously serve business and development interests. This change in global commodity chains will particularly influence the, from a development perspective, very important export driven part of the Indonesian agricultural economy. For suppliers in developing countries the global standards are becoming de facto market requirements. In the face of this development, Indonesian actors from business, civil society and government need to redefine their position. However, the social and economic effects of partnering for sustainable change in agricultural commodity chains are still widely debated. The current state of research indicates that little is known about the activities of partnerships in producing countries and what they achieve with regard to the beneficiaries they intend to serve. The tendency that partnerships compete with each other for market share, prominence and legitimacy adds to the confusion. Against this background, this research program aims to fill the knowledge gap on the capacity of global certifying partnerships to deliver on their proposed added value, particularly by analyzing the social and economic effects of global certification for (smallholder) farmers in Indonesia. The sustainability challenges of the commodity chains are understood as a ‘development problem’ and an interrelated ‘governance problem’. To study these interrelated problems our research will take an institutional systems perspective. This entails a focus on the interrelations between the main actors in the field of research, their activities, and the effects of these activities, while it is assumed that in the short term characteristics of the agricultural production system may constrain any system changes. Focal points of the program are intervention logics, effects, options for change and strategies for change, which are connected through joint knowledge production of the main actors. The global coffee and palm oil chains serve as main fields of research in the assessment part of our program. The prospective part of our research includes cocoa, spices, and aquaculture; commodities on which new certifying partnerships are in an early stage of development and implementation. These agricultural commodity chains are characterized by various sustainability challenges, including environmental degradation, abundant use of agrochemicals, poor working conditions, and widespread poverty. In the analysis the program combines governance theory with (agricultural and institutional) economic theory and applies a variety of quantitative and qualitative sustainability assessment methods. Representatives of governments, NGOs, certifying partnerships, and farmer's organizations clearly expressed their willingness to participate in the program and its multi-stakeholder workshops.
4. Detailed description of the Priority Programme (Max. 2500 words)

   Word count: 2493

a. Scientific Background (shared research question(s) or mutual research theme, problem definition)

Problem definition
Indonesian actors have become intensively involved in many global certifying partnerships that connect Southern production to Northern consumption. These partnerships aim to promote the sustainable production of agricultural commodities and are expected to simultaneously serve business and development interests. However, important questions remain regarding the capacity of partnerships to deliver on their proposed added value, the type of social and economic change partnerships are able to realize, and the opportunities and constraints to improve the livelihood conditions of (smallholder) producers.

Background
Partnerships between businesses and nongovernmental organizations (NGOs) have emerged since the beginning of the 1990s as potentially important mechanisms for addressing global challenges related to sustainable development. According to Seitanidi we are currently living in what she calls the ‘partnership society’. In this society, new relationships between governments, businesses and NGOs are introduced as a new way to govern sustainability issues (Seitanidi, 2010).

Partnerships have been defined as non-hierarchical, self-organizing, and coordinating multi-stakeholder arrangements to promote more sustainable production and consumption practices, while using the market as a coordinating mechanism to realize this objective. Partnerships can also be categorized as post-territorial, because their spatial boundaries are not demarcated by fixed, jurisdictional borders (Glasbergen, 2007).

By creating an institutionalized platform for collaboration and by facilitating collective action, partnerships are presumed to promote public goods as well as private interests. Particularly in agricultural commodity chains connecting Southern producers with Northern consumers, partnerships have experienced considerable proliferation over recent years, and provide a framework to bring together the key actors needed to design and implement effective solutions to the sustainability challenges of such chains (Weidinger and Schmitz-Hoffmann, 2007; Bitzer et al., 2008; Bitzer and Glasbergen, 2010).

The term commodity chain is used here for the practical reason of uniformity of terminology, while it is recognized that the term is more or less interchangeable with supply chain or value chain.

More specifically, partnerships between NGOs and businesses, sometimes with the involvement of governments, are supposed to promote sustainable farming practices, improve market access, and establish efficient commodity chains using private standard setting and certification as the main mechanism of change. Next to economic functions, partnerships perform several non-profit functions, including social and political functions, such as capacity building, education and advocacy. To this end partnerships usually implement a series of activities at the production level to assist farmers with knowledge and resources.

There are several categories of certifying systems:
(1) Business to business (B2B) certification systems
(2) NGO networks that define specific commodity guidelines for sustainable agriculture
(3) Multi-actor certification systems developed in collaborations between businesses, NGOs, and sometimes governments
(4) Governmental certifications (see for more detail Arifin, 2009)
This research program will focus on the multi-actor arrangements, which tend to become the most important in global agricultural commodity chains.

However, the social and economic effects of partnering for sustainable change in agricultural commodity chains are still widely debated. Proponents argue that partnerships might be a sensible solution based on the notion of shared responsibilities to address commodity-related development challenges, contribute to pro-poor growth and develop sustainable economies (Springer-Heinze, 2007; Van Tulder and Fortanier,
Critics refer to the unproven track-record of partnerships and view partnerships as representing neoliberal discourses and new vehicles of corporate control over global food production, trade, and consumption (Raynolds et al., 2007; Fuchs et al., 2011).

The current state of research indicates that little is known about the activities of partnerships in producing countries and what they achieve with regard to the beneficiaries they intend to serve (Gregoratti, 2011; Blowfield, 2007; Lund-Thomsen, 2009). So far, most research has concentrated on the effects of Fairtrade and organic standards. Some studies discovered a positive effect on producer organizations and increased welfare for smallholder farmers (Bray et al., 2002; Calo and Wise, 2005; Bacon, 2005; Bacon et al., 2008). Other studies found only small direct income and production effects (Valkila and Nygren, 2010; Ruben and Fort, 2011; Barham et al., 2011; Beuchelt and Zeller, 2011). For other certification schemes the effects on producers do not appear clear cut either (Ruben and Zuniga, 2011; Kolk, 2011).

The tendency that partnerships tend to compete with each other for market share, prominence and legitimacy adds to the confusion (Bartley, 2007; Bagnoli and Watts, 2003). Competition among standards has been observed in the global coffee sector (Reynolds et al., 2007; Muradian and Pelupessy, 2005) and in forestry (Bartley and Smith, 2010), where the existence of too many competing schemes has impeded the emergence of functional links across standards (Visseren-Hamakers and Glasbergen, 2007). In other sectors competition and cooperation between standards have been shown to exist simultaneously (Riisgaard, 2009).

b. Objective(s)

Against this background, this research program aims to fill the knowledge gap on the capacity of global certifying partnerships to deliver on their proposed added value, particularly by analyzing the social and economic effects of global certification for (smallholder) farmers in Indonesia. Based on quantitative and qualitative empirical research and the involvement of stakeholders in the research the program aims to formulate policy recommendations to improve the livelihood conditions of (smallholder) producers in the face of the development of the new paradigm of sustainable certification in global agricultural commodity chains.

The global coffee and palm oil chains serve as main fields of research in the assessment part of our program. Coffee is the frontrunner commodity in terms of partnership occurrence (Bitzer et al., 2008), while palm oil production is confronted with a well-developed sector-wide global partnership (Schouten and Glasbergen, 2011). The prospective part of our research includes cocoa, spices, and aquaculture; commodities on which new certifying partnerships are in an early stage of development and implementation. These chains are characterized by various sustainability challenges, including environmental degradation, abundant use of agrochemicals, poor working conditions, and widespread poverty.

The sustainability challenges of these commodity chains refer to a ‘development problem’ and an interrelated ‘governance problem’ (Bitzer, 2011). The development problem is manifest in the difficulty to improve the livelihoods of (smallholder) farmers in the face of environmental degradation, unfavorable market access and lacking support services in rural areas. The governance problem is manifest in the difficulty to create meaningful interactions among stakeholders from business, civil society (including representatives of smallholders), and governments that result in positive social and economic effects for (smallholder) producers in the South.

c. Workplan (approach, methods, deliverables, management)

Conceptual approach of the program

To study the interrelated development and governance problem our research will take an institutional systems perspective. This entails a focus on the interrelations between the main actors in our field of research, their activities, and the effects of these activities, while it is assumed that in the short term characteristics of the agricultural production system may constrain any system changes (see figure 1).
Overall research questions of the program

Based on this perspective the following overall research questions have been formulated:

1. What are the social and economic effects of sustainability certification by global partnerships on the (smallholder) producer level?

2. How can these effects be understood in the system of interactions between the main actors in sustainability certification?

3. How can the social and economic effects, particularly regarding smallholders in global certifying partnerships, be improved?

4. What are applicable roles and strategies of governments related to global certifying partnerships?

Each of the projects will provide building blocks for our understanding of the functioning of the system as a whole, and makes use of the toolbox of sustainability assessment methods. The research projects follow a mixed methods approach comprising quantitative and qualitative aspects. The involvement of major stakeholders at different points in time will be critical for the implementation of the research design.
Figure 2 presents the integrated impact analysis of the program. Each of the projects will be related to the overall research questions it addresses and its contribution in this sequence of research activities.

**Figure 2 Integrated impact analyses**

All PhD students and the postdoc take as a starting point a joint analysis of (the history of) what we call the ‘intervention logics’ of global certifying partnerships. Intervention logics are understood as the values the partnerships aim to realize and how they aim to realize them. Another topic of joint analysis will be the characteristics of global agricultural commodity chains, including how these chains work and how they are institutionalized is of major concern here. Furthermore, the joint analysis will focus on the agricultural systems of the respective commodities, and how these systems are embedded in society and interact with the physical environment.

Projects 1 and 2 (PhD) will study the first research question, particularly the attributes that farmers address to livelihood improvements as a consequence of participating in the intervention logics of global certifying partnerships. The livelihood aspects taken into consideration are social (job security, removal of child labor, better working conditions, etc.) or economic (better prices, better market access, improvements in yield, etc.).

Project 3 (PhD) primarily contributes to the third research question. This project takes an institutional economics approach to analyze and define effective management structures. This approach will particularly contribute to insights related to effective certifying partnerships.

Projects 4 and 5 (PhD) contribute to research questions 2 and 4, by relating the intervention logics of the partnerships to the intervention logics of NGOs and governments. NGOs are assumed to play a vital role in the communication between the partnerships and local producers, either as a formal member of the partnerships or campaigning against them. Governmental policies are assumed to be essential for the effectiveness of partnerships.

Project 6 is the postdoc project. The postdoc will sustain the steering group in coordinating the fieldwork of the PhDs, contribute to the overall program with a literature study on developments in the field of research on global certifying partnerships, and performs integrated research on these partnerships for agricultural commodity chains from the perspective of joint knowledge production.

**Deliverables**

*Description of research timetable for the first year*
In the first year the PhD students follow three classes at Maastricht University:
- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore they will work as a class on a basic paper on:
- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the PhD students will work out their own research into an operational research plan in such a
way that field work can start in the second year. The research plan must be approved by the supervisors at the end of the first year, and is a prerequisite to continue with the project.

The postdoc will finish a literature review on certifying global partnerships. He/she will also operationalize the concept of joint knowledge production and ensure integration of this focus in the PhD projects.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the detailed research plans.

**Approximate time schedule for the remaining duration of the program**

The second year is dedicated to 8 months of field work of the PhD students. In between they will meet as a class at the University of Lampung to discuss progress and results. The last 3 months they will work on their first paper (see detailed project descriptions) at Maastricht University.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the results.

The third year will follow the same pattern as the previous year with this difference that the PhD students will finish their field work and write two papers that are scheduled in their detailed project plan. Depending on where the PhD students come from, the yearly multi-stakeholder workshop will take place at the University of Lampung or another Indonesian University. Furthermore it is the intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program of Dr. Hospes (see 11). The postdoc will finish 2 papers on joint knowledge production in global certifying partnerships.

The fourth year the PhD theses will be finished and defended at Maastricht University. It is the intention of the program leaders to also work out the conclusions on the level of the systems approach.

The research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

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<tr>
<th>Year</th>
<th>PhD students</th>
<th>Postdoc</th>
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<tr>
<td>Year 1</td>
<td>Courses at Maastricht University</td>
<td>Literature review on certifying global partnerships</td>
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<td>Joint analysis intervention logics and agricultural system characteristics (internal papers)</td>
<td>Joint analysis intervention logics and agricultural system characteristics (internal papers)</td>
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<td></td>
<td>Operational individual research plan (must be accepted at end of year 1)</td>
<td>Operationalization of concept of joint knowledge production (internal paper)</td>
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<td>Year 2</td>
<td>Field work in Indonesia</td>
<td>Sustaining field-work PhDs</td>
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<td>1st paper international journal</td>
<td>1st paper on joint knowledge production</td>
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<td>Master class Indonesia</td>
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<td>Year 3</td>
<td>Multi-stakeholder workshop</td>
<td>Multi-stakeholder workshop</td>
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<td>Finish field work in Indonesia</td>
<td>Sustaining field-work PhDs</td>
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<td>2nd and 3rd paper international journal</td>
<td>2nd paper on joint knowledge production</td>
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<td>Multi-stakeholder workshop and workshop in cooperation with Wageningen University</td>
<td>Multi-stakeholder workshop and workshop in cooperation with Wageningen University</td>
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<td>Year 4</td>
<td>Finish and defend PhD thesis at Maastricht University</td>
<td>3rd paper on overall results program in cooperation with program leaders</td>
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<td>International conference in Indonesia</td>
<td>International conference in Indonesia</td>
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Management
The program will be coordinated by an international steering group, sustained by an international expert advisory group.

Steering group:
- Prof. Glasbergen (chair), Maastricht University
- Prof. Arifin (co-chair), University of Lampung
- Prof. Purwo Santoso, Gadjah Mada University
- Dr. Cövers (secretary), Maastricht University
- Dr. Ismono, University of Lampung

The international expert advisory group consists of all supervisors and specific advisors for each project:
- From the Netherlands: Prof. Kemp, Prof. Leroy, and Dr. Bitzer.
- From Indonesia: Prof. Zakaria, Prof. Yustika, Dr. Darmastuti, Dr. Hasan, and Dr. Mawardi.

Financial management of the joint research program (JRP) and its research projects will be handled by the ICIS managing director Anja van Bogaert (Maastricht University).

d. Scientific Relevance (including relevance of anticipated results)

Very recently some overview studies have been published regarding our field of research. These reviews show that:

- The knowledge base of certifying partnerships is "still very thin, sparse and fragile in terms of scope, method and depth of coverage" (ICT, 2011b, x).
- Relatively little is known on crucial questions such as the actual effects of standards on producers' income, livelihoods and the environment (ISEAL, 2008a; ICT, 2011b, xi).
- There is a lack of robust methodologies in determining the effects of certification (KPMG, 2012; ISEAL, 2011; Blackman and Rivera, 2011).
- Questions concerning the role of governments (and other societal actors) regarding private certification are not sufficiently addressed in current literature (ISEAL, 2008b; PBL, 2010).

Almost all empirical studies in this field are based on rather isolated qualitative case study approaches. Moreover, most studies are carried out in Africa and Latin America (ICT, 2011a, x).

By taking a combination of quantitative and qualitative research and studying the effects of global certifying partnerships from an institutional systems perspective, which includes not only market parties/business community (farmers, traders, producers, etc.) but also the role of NGOs and governments, our program adopts an innovative perspective on partnerships that addresses current knowledge gaps and that is challenging in depth and in coverage.

The program will contribute to:
- Partnership literature, particularly the role of partnerships in fostering sustainable agricultural systems.
- Commodity chain literature on the social and economic effects of certification in global commodity chains, particularly the effects at the supply side.
- Development literature, particularly on the empowerment of (smallholder) farmers in global agricultural chains.
- Governance literature on the (new) role of NGOs and governments regarding the new demand for sustainable certified agricultural products, and on the experiences with joint knowledge production at the science-policy interface of global certifying partnerships.
- Furthermore, the program will contribute to an integrated approach of sustainability assessment as an emerging scientific field for interdisciplinary and transdisciplinary research.
5. Projects within the programme (include project title and reference number, names of Project Leaders and abstracts) (Max. 400 words per project) Word count: 2362 – 6 projects

1. Social and economic effects of coffee certification (21-SPIN-JRP-1; Prof. Glasbergen, Prof. Arifin, Dr. Cörvers, Dr. Ismono; Advisor: Dr. Mawardi)

The coffee production system in Indonesia is mainly characterized by smallholder production (90%). It is also a sector with several (competing) global certifying entities, some of which have a partnership structure. These certifying partnerships have somehow restructured the coffee supply chain in Indonesia, although its magnitude might not be as large as the impact potentials on strengthening the social capital and improving the community-cooperative governance in the producing regions. The partnerships generally require establishment of farmers’ organizations and locally adopted conducts. However, many of these standards provide no guarantee that direct benefits, particularly price premiums, would reach farm laborers or local communities. In contrast to the palm oil sector (see project 2) the Indonesian government did not develop its own certifying system.

This project aims to assess both the livelihood effects of global certification for the farmers and the changes in agricultural practices.

The following research questions have been formulated:

- How do farmers perceive the various attributes of the intervention logics of global certifying partnerships?
- In what ways and to what extent do the intervention logics of global certifying partnerships change the agricultural system, in terms of production, processing, and trading of coffee?
- What is the relative importance of certification schemes on the livelihood of smallholders?

Conjoint analysis and frame analysis are used to measure the various attributes of farmer's decision making in adopting the global certification. System analysis, which consists of principal component and agricultural economic analysis, are applied in research on the other research questions. Principal-component analysis (PCA) is used to measure the significance of determinant factors that affect the performance of the intervention of global certification schemes in the field. Agricultural economic analysis focuses on the production system, processing system and trading/distribution system. Qualitative research takes place in participatory multi-stakeholder workshops and through semi-structured interviews with main stakeholders in the palm oil chain.

Research will take place in two regions, comprising the two main coffee varieties: Robusta coffee in the Province of Lampung (Sumatra), and Arabica coffee in Toraja Highlands of South Sulawesi. Non-certified farmers will act as a control group within these regions.

2. Social and economic effects of palm oil certification (21-SPIN-JRP-2; Prof. Glasbergen, Prof. Arifin, Dr. Cörvers; Advisor: Dr. Hassan)

Unlike the coffee production system, the palm oil system is characterized by independent smallholder palm oil farmers and large production units to which smallholders are connected (the Nucleus Estate Smallholder System NES). Up to now mainly NES centers are certified. Since 2007, Indonesia has been the largest CPO producer in the world, reaching about 24 million ton of production in 2011 and exporting about 19 million ton to the world market. Rapid expansion of palm oil area of 372 thousand hectare per year (about 7 percent per year) in the last decade has occurred at an unclear spatial planning and at the wake of environmental consequences. In reaction to the main certifying partnership - the Roundtable on Sustainable Palm Oil (RSPO) - the Indonesian government recently developed its own certifying system: Indonesian Sustainable Palm Oil (ISPO). Another feature that makes palm oil certification different from coffee certification is the large number of land use conflicts, which also concern the relationship not only between nucleus and smallholders, but also between cash crops and staple foods.
The following research questions have been formulated:

- How do farmers perceive the various attributes of the intervention logics of RSPO and ISPO?
- In what ways and to what extent do these intervention logics change the palm oil chain?
- What is the relative importance of livelihood effects on smallholders compared to the changes in agricultural practices, among them the prevention of land use conflicts?

Through desk analysis and semi-structured interviews the differences between RSPO and ISPO and the consequences of adopting the certification schemes will be analyzed. Conjoint analysis and frame analysis are used to measure the various attributes of farmers decision making in adopting the global certification in palm oil farming and choosing which certification schemes (RSPO and RSPO) to meet the sustainable development objectives. System analysis, which consists of principal component and agricultural economic analysis, are as next steps. Principal-component analysis (PCA) is used to measure the significance of determinant factors that affect the performance of the intervention of logics of GCPs, i.e. palm oil certification schemes in the field. Agricultural economic analysis focuses on the production system, processing system and trading/distribution system.

Qualitative research takes place in participatory multi-stakeholder workshops and through semi-structured interviews with main stakeholders in the palm oil chain.

Research will take place in two regions: the Province of Riau in Sumatra, and the Province of East Kalimantan in Borneo, and will take non-certified palm oil plantations as a control group in each region.

3. Institutional economic analysis of global certifying partnerships in Indonesia
(21-SPIN-JRP-3; Prof. Kemp, Prof. Arifin, Dr. Cörvers; Advisor: Prof. Yustika, Prof. Zakaria)

The trend towards certification in global agricultural commodity chains involving developing country suppliers is expanding rapidly. While some chains, such as coffee and palm oil, already have a lot of experience with certification, in other chains, including cocoa, spices and aquaculture, global certification partnerships are in an early stage of development.

Through a comparative institutional analysis, this project aims to contribute to our knowledge on the adaptation and implementation of certifying arrangements for coffee, palm oil, cocoa, spices, and aquaculture.

The following research questions have been formulated:

- What are the institutional mechanisms (typology of institutions) and institutional environments (internal and external) that contribute to the dynamics of global certifying partnerships in the commodity chains?
- What institutional characteristics are required for effective certification in different agricultural commodity chains?
- What are the consequences of institutional arrangements being chosen for realizing the social and economic sustainability objectives of these partnerships?

The project will identify and categorize the institutional arrangements regarding certification in each agricultural commodity chain and compare these arrangements across agricultural commodity chains. To categorize the institutional arrangements, the researcher develops matrices based among others actors, rules and relationships (formal and informal), norms and conventions (adapted and enforced). Desk analysis and semi structured interviews will be used to establish the matrices, based on the network-mapping techniques. Second, institutional linkages between the arrangements and organizations (government, business, and civil society organizations) will be analyzed to examine the potential effectiveness (opportunities and constraints) of global certifying partnerships to the livelihood
improvement of smallholder producers of five commodities. Third, based on the information of first two steps, the researcher will analyze the institutional fitness to the farmers’ organization of five commodities that could have potentials to livelihood improvement of smallholder producers. Qualitative research takes place in participatory multi-stakeholder workshops and through semi-structured interviews with main stakeholders in the five commodity chains.

4. Effective mobilization of non-governmental organizations in global certifying partnerships (21-SPIN-JRP-4; Prof. Glasbergen, Prof. Santoso, Dr. Bitzer; Advisor: Dr. Darmastuti)

This project aims to gain insights on how to improve the inclusion of local sustainability values and interests through Indonesian NGOs in global certifying partnerships. NGOs may perform roles related to amongst others:

- The identification and prioritization of problems and supporting research;
- The improvement of coordination and communication among stakeholders;
- The employment of activities contributing to the empowerment of smallholders and their institutions;
- The endorsement of fair and transparent trading procedures and policies that support sustainable production systems.

This project will study the whole field of Indonesian NGOs active on certification related roles on coffee and palm oil. The research covers both collaborating NGOs, which participate in the development of certification schemes, and campaigning NGOs, which are opposing certification, their interrelationships, and the effects of their strategies. If possible the researcher will include three other agricultural sectors, i.e., cocoa, spices and aquaculture.

The following research questions have been formulated:

- What are the characteristics of the NGO-landscape active in the field of sustainable coffee and palm oil production systems?
- What different intervention logics can be identified in this NGO-landscape on the sustainable improvement of production systems and how are they related?
- In what way and to what extent do NGO strategies towards global certifying partnerships contribute to the inclusion of livelihood interests in the arrangements and to the empowerment of smallholders?

As a first step, an inventory will be made of (environmental, social and development) NGOs active in the field of coffee and palm oil. Here the formal methodology of Net-Map will be used. As a second step, the project analyzes what roles the NGOs have developed overtime, why, and how these roles are fulfilled. This part will be based on a functional analysis. As a third step, concrete projects (collaborations and campaigns) of the NGOs will be connected to these roles, which will give a full overview of the activities. Based on that picture a further selection will be made of projects to be studied in more detail. The last step addresses the contribution of NGOs to sustainable production related collective action problems and the conditions under which they may improve the institutional system as described in the joint program.

Research methods include the study of documents, semi-structures interviews and participatory observation during the whole research project. At several moments the results of the research will be discussed in workshops and focus groups with NGOs.

5. Roles of governments related to (private) certification of global agricultural commodities (21-SPIN-JRP-5; Prof. Glasbergen, Prof. Santoso, Prof. Leroy; Advisor: Dr. Darmastuti)

Partnerships that certify agricultural commodities should be taken seriously by governments because they represent legitimate expressions of societal perspectives. However, they also create dilemmas for them, as they need to find a new balance between public and private responsibilities. Current research shows a lot of
uncertainty among governments on how to react. This is further complicated by the variety of certifying arrangements and the competition among them. Moreover, from various studies it has also become clear that the effectiveness of private certification strongly depends on governmental policies.

This project aims to:

- Analyze the relationships between public responsibilities of governments and private responsibilities of certifying partnerships.

Therefore:
- It analyzes the current policies (local, provincial, national) related to agricultural certification in Indonesia; and
- Defines appropriate roles and effective strategies of governments regarding private certification given the need for a more sustainable production and improvement of the livelihood of (smallholder) producers. Both analyzes will be set against the context of policy system changes in Indonesia; from a centralized to a decentralised/polycentric system.

The project assumes that the roles and strategies in Southern countries (Indonesia) and Northern countries (The Netherlands) will be different though related. Therefore comparative research will take place in both countries on the five agricultural commodities of project 4 (coffee, palm oil, cocoa, spices, and aquaculture). The research covers both the effects of governmental participation in the development of private certification schemes, and their reaction as a non-participant.

The first pillar of the project is an analysis of the intervention logics of current government policies in Indonesia regarding well-developed private certification schemes. This research will take place on coffee and palm oil certification in the same regions as PhD 1 and 2 (for coffee: the Province of Lampung, Sumatra, and Toraja Highlands of South Sulawesi; for palm oil: the Province of Riau in Sumatra, and the Province of East Kalimantan in Borneo). The second pillar of the project comprises a definition of scenarios regarding possible roles and strategies of governments related to private certification. The research will confront the scenarios with government practices on coffee and palm oil certification, and a broader set of certification schemes that are in the process of development (cocoa, spices, and aquaculture). The last pillar regards the application of the scenarios in an analysis of government policies in the Netherlands and a comparative assessment of Indonesian and Dutch government roles and strategies. Based on the research the PhD will define policy recommendations for effective policy interventions.

Research methods include: interviews with government officials, focus groups with farmer groups and government officials, multi-stakeholder workshops, scenario writing methodology, document analysis.

6. Joint knowledge production in global certifying partnerships

The aim of this project is to analyze global certifying partnerships for agricultural commodity chains from the perspective of joint knowledge production. As integral part of the program, this project will tap into the research activities and results of the PhD projects, in particular the projects on coffee and palm oil, and will ensure the integration of the PhD projects.

The objective of the project is to better understand how in global certifying partnerships the relation between the demand and supply of knowledge is organized. In particular, the project seeks to analyze what types of knowledge are produced and used (and by whom), and in what ways processes of knowledge co-production are ‘designed’. The insights should result in recommendations to optimize the process of joint knowledge production in global certifying partnerships for agricultural commodity chains.

The following research question is central to this project:

- What are the experiences with joint knowledge production in global certifying partnerships and how can this process be improved?
The project will focus its analysis on the empirical manifestations of joint knowledge production and its effects in recent and current practice of different global certifying partnerships, such as coffee and palm oil (established global partnerships) and probably also cacao, spices, and aquaculture (new global partnerships). This comparative analysis (old and new partnerships, different agricultural commodities) is expected to provide insights that will be useful to improve the process of joint knowledge production in global certifying partnerships.

Qualitative research methods (stakeholder analysis, frame analysis) will be connected to participatory multi-stakeholder workshops (organized by the PhD-projects) and through interviews with main stakeholders in the field of the global certifying partnerships under review. Quantitative research (Q method using factor analysis) is envisioned through an online questionnaire for a large number of stakeholders and other relevant actors about the co-production of knowledge, where respondents will be asked to rank-order statements according to how much they agree/disagree with each statement.

Scientific background PhD students: sociology, political science, environmental studies, (agricultural or institutional) economics. The postdoc fellow is a social scientist and preferably has experience with fieldwork in a developing context.

6. Relevant publications by members of the research group(s) (as defined under 2) (a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

- **International (refereed) journals**
  (include journal impact factors. Mandatory if your proposal is entered in the themes: Infectious diseases and Health or Food, Non-Food and Water Research. Optional for Social and Economic Development)


**- National (refereed) journals**


**- Books or contributions to books**


### 7. Literature references


- Bacon, C.M. et al. (2008), Are sustainable coffee certifications enough to secure farmer livelihoods? The millennium development goals and Nicaragua’s Fair Trade cooperatives, *Globalizations*, 5: 259–274.


8. Added value of the integrated approach (including scientific disciplines involved)

Added value will be realized on three levels: perspective, methods, and actions. The added value materializes in a common teaching program, research, and products (articles, presentations, etc.).

This program places the development issues related to Southern production of globally traded agricultural commodities in an institutional systems perspective (see figure 1). This approach recognizes the
interrelations between various actors (scientists, businesses, NGOs, and governments) and the inextricably aspects of the sustainability problem (economy, environment, and social issues), which are explored in an integrative way.

First, although each of the research projects studies specific actors, their activities, and the relationships with other actors in the system, they provide building blocks for a better understanding of the system as a whole. This systems perspective of the field of research will be the starting point of each project and preserved throughout the whole research program. All PhD students will jointly get a course on this perspective and the history of (certifying) partnership research at the start of the program.

Second, the program combines governance theory with (agricultural and institutional) economic theory and applies a variety of sustainability assessment methods. These methods include conjoint analysis, frame analysis, scenario development and stakeholder analysis. As a second course at the start of the program the PhD students will get training in the two disciplinary perspectives of governance and economics, their methods and their interrelationships. While known with the whole set of methods applied in the program, they will use a specific selection in their own project.

Furthermore, the PhD students will start with a study of the elements of the institutional system that are of relevance for all projects. They will together map the certifying global partnerships in the field of coffee and palm oil that are of relevance for Indonesian agriculture. They will also take on a common analysis of the characteristics of the two agricultural systems.

In a yearly meeting the PhD students will present their project results to the whole class, discussing the contributions of their knowledge to a better understanding of the institutional system as a whole, and what this implies for the next steps in their own research.

Third, the program as a whole aims for an action component. At several times stakeholders will be involved in the research. Stakeholders include representatives of agriculture, NGOs, businesses, science, and governments. Taking the systems approach as the perspective for these multi stakeholder workshops opens the opportunity to present the variety of projects in one single setting, which will improve conceptual and social learning of the PhD students as a class.
9. Relevance of the programme for development issues in Indonesia

Word count: 512

a. Societal relevance

Since the second half of the 1990s an increasing amount of initiatives can be observed to certify sustainable agricultural production in the South. These initiatives are mainly Northern based. Market trends show that the overall demand for certified sustainable agricultural products is still rising. Also the business case for sustainability is becoming stronger, as companies are facing pressure to act on corporate social responsibility. NGOs from the South are increasingly involved in these initiatives, while many governments from the North and the South take a more awaiting position. This change in global commodity chains will particularly influence the, from a development perspective, very important export driven part of the Indonesian agricultural economy. For suppliers in developing countries the global standards are becoming de facto market requirements. Indonesian actors from business, civil society and government need to redefine their position. Currently there is still a lot of uncertainty about the benefits for their farmers, particularly smallholders, and there are indications of unevenly distributed revenues to the benefit of Northern actors in the agricultural chains. Our research program will provide the theoretical perspectives, methodologies and empirical data to act upon the new global dynamics from a Southern perspective that safeguards sustainability and improves the livelihood of the (smallholder) producers.

b. Scientific capacity / institution building

This program aims to contribute to the field of sustainability assessments for policy-making in the pursuit of sustainable development through its methodological focus on quantitative and qualitative training and research in a (global) governance context. Scientific capacity will be developed in a field where there is an urgent need for scholars in Indonesia who are trained in multidisciplinary and integrative approaches towards sustainable development, enabling them to assess and deal with the complexity involved from a systems perspective. Furthermore, there is a need for professionals that are able to cross ‘boundaries’ between different social scientific disciplines and domains, and that can operate at the interface of science, policy and society.

c. Dissemination and knowledge sharing

Dissemination takes place through:

- 5 PhD theses and a significant number of scientific papers (15-20). Each PhD student will publish 3 papers in international journals and (at least) 1 professional paper in an Indonesian journal. The postdoc fellow will publish 2 papers in international journals.

- In the 2nd and 3rd year a multi-stakeholder workshop will be organized in Indonesia with representatives from agribusiness, farmer groups, NGOs and governments.

- In the 3rd year a joint workshop/conference will be organized in collaboration with a related research program of Wageningen University.

- Each of the PhDs and the postdoc will present their studies two times at an international conference.

- The research program will be concluded with an international workshop/conference in Indonesia for scientists and representatives from agribusiness, farmer groups, NGOs and governments.

- The program will develop its own website and publish a yearly newsletter. The website will be based on a learning network approach using web 2.0 social software to enhance collaboration and social learning. Prototype website (to be elaborated): http://gcp4sas.net/elgg/. This website will be connected to the website on Partnerships: www.unpop.nl.
10. Embedding and additional support (science policy and activities of participating research groups)  
(Max. 500 words)  

Word count: 496

ICIS (Maastricht University) is an international, multidisciplinary research institute with a unique capacity to analyze sustainable development problems. Its aims are to conduct research and provide education in the fields of integrated assessment and sustainable development. Its research is grounded in thematic domains such as global dynamics, innovation, governance, and philosophy of sustainable development. In line with the strategic program of Maastricht University, ICIS has developed the Maastricht University Graduate School of Sustainability Science (2010) and the Master program Sustainability Science and Policy (2011). The governance focus of this JRP contributes considerably to the governance dimension of ICIS’ research program. This JRP fits also very well in ICIS’ ambition to put more attention to the socio-economic dimension of sustainability issues, in addition to the environmental dimension.

The Department of Agricultural Economics/Agribusiness at the University of Lampung (UNILA) is home of more than 550 students, undergraduate and graduate programs, and it is one of the leading research institutions in sustainable development strategies of agricultural commodities. The department develops three main integrated strategies of learning experience: teaching, research and the extension system or community. This joint umbrella-research program is part of a broader mission of the university to be one of world class university (WCU) and the top-ten rank university in the country. Faculty members in the department are well-known and respected in the field of agricultural policy and sustainable development strategies in the country, where they have shown their significant contributions both in academic activities and policy-making processes at national and regional level. The supervision of PhD research in This JRP will strengthen the learning process and research activities in the field of sustainable development strategies of agricultural commodities in the department. It will also support the broader ambition of the University of Lampung regarding improvement of skills of staff in the field of integrated sustainability assessment methodologies.

The Gadjah Mada University (UGM) is the largest and the oldest national university in Indonesia With a mission to promote excellence in teaching, learning and research opportunities, the university offers high quality education and programs across 18 faculties. Gadjah Mada University prides itself in 69 graduate programs, 24 diploma programs and a Graduate School. These programs aim to generate professional and capable graduates equipped with leadership capacities, innovative approaches and moral and cultural understanding that will serve the needs of the society and bring prosperity to Indonesia, as well as the global community. Gadjah Mada University has been traditionally considered to be one of the top three premier higher education facilities in Indonesia. The Faculty of Social and Political Sciences has a growing focus on international relations and comparative politics, public policy, media and social and developmental studies which extend across the region and the globe. The JRP will contribute to its research on the politics of environmental policy-making, democracy and democratization, as well as decentralization and local government in Indonesia. The program will also strengthen its capacities related to research methods in the field of integrated sustainability assessment.

11. International co-operation and network building  (Max. 2000 words)  
Word count: 1512

Joint program development took place in two workshops and additional meetings of the program steering group.

**Workshop 1 took place at Maastricht University (23-24 January, 2012) with an additional two days of meetings of the steering group**

From Indonesia Prof. Arifin and Dr. Ismono were present, and from the Netherlands Prof. Glasbergen and Dr. Cörvers had invited the following guest speakers: Dr. Otto Hospes (Wageningen University), Dr. Han Aarts (MUNDO), Dr. Verena Bitzer (Wageningen University), Prof. Rene Kemp (Maastricht University), and Greetje Schouten MSc (Utrecht University). Four other members of Maastricht University (ICIS) attended the workshop. The accepted Letter of Intent (pre-proposal SPIN programme) had been made available beforehand to the participants.
The objectives of the workshop were formulated as follows:
- To discuss the scientific value and potential contributions to development of the suggested research program.
- To work out the overall research questions of the research program.
- To reflect on the institutional system perspective for the program.
- To reflect on research questions and methods of research for each project.
- To decide on appropriate agricultural sectors to study.
- To decide on application for DIKTI PhD students.

The workshop started with an introduction by Prof. Glasbergen, who elaborated on the development of partnership research, the missing Southern perspective in current research, and introduced the institutional systems perspective.

Dr. Hospes introduced his research program on environmental sustainability related to the palm oil chain at Wageningen University (8 PhDs starting later this year). He also commented on the research perspective.

From the discussion it was concluded that:
- The institutional system perspective is an interesting perspective to take as a starting point.
- It is methodologically interesting to compare certified and non-certified companies.
- The research might become more interesting if it takes various partnerships and agricultural commodities into account.

Furthermore it was concluded that a close contact between the Wageningen program and the Maastricht/Indonesian program will be fruitful for both. A preliminary decision was made to bring the PhD students of both programs together at some time and to organize a joint international workshop.

Dr. Bitzer introduced her research on partnerships in agricultural commodity chains with a particular focus on the effects of partnering on the producer level and empowerment of smallholders.

From the discussion it was concluded that:
- The concept of intervention logics of the actors involved in the research field might be interesting.
- The focus on social and economic effects needs reflection on how to measure these effects, which resulted in the suggestion to combine conjoint analysis with frame analysis.

Dr. Aarts discussed experiences of cooperation between researchers from Maastricht University and Indonesia, expressed Maastricht University’s willingness to organizationally support the program, and provided information on the opportunity of DIKTI PhDs.

From the discussion it was concluded that, given the aspirations of the joint program in terms of scientific research and contribution to development issues, DIKTI PhDs will be interesting.

Prof. Kemp gave an overall appraisal of the intended research and particularly discussed preliminary research questions and the toolkit of sustainability assessments methods.

From the discussion, which focused on operationalization of the research, it was concluded that an interesting methodological contribution could be realized by combining methodologies of Lampung University’s economists and the integrated assessments methodologies and governance perspective of Maastricht University-ICIS in one program.

Ms. Schouten presented her work on the Roundtable on Sustainable Palm Oil and the Roundtable on Responsible Soy, with a specific focus on the problem of creation legitimacy.

This presentation led to a discussion about the partnerships and agricultural chains to take into account, it was suggested to take coffee and palm oil to assess extensively and to conduct prospective research on
spices, aquaculture and cocoa.

The workshop was concluded with a summarizing presentation by Prof. Arifin. In the remaining two days of meetings the main elements of the program were discussed. Furthermore, a first discussion was initiated about selection of PhD students and the Lampung workshop to be hold in February.

After completion of the first full research program, the proposal was sent out for comments to Prof. Leroy (Radboud University), Prof Arts (Wageningen University), and Ms. Luli Pesqueira MSc (private sector program of Oxfam/Novib). Their suggestions were incorporated.

**Workshop 2 took place at the University of Lampung (28 February, 2012) and an additional four days meeting of the steering committee**

The first day Prof. Glasbergen, Dr. Cörvers and Indonesian project partners were invited by the rector of the University of Lampung.

The rector expressed the importance of the program for the curriculum development of his university and his strong support to the program.

On the same day a focus group was organized with 25 coffee smallholder farmers of a farmers group. Some of them were certified farmers (Rainforest Alliance), others willing to certify and others not certified. Main topics of discussion were their experiences with certification, their assessments, and research topics that are of interest for them.

Amongst others, the discussion revealed that there are difficulties to get certified. Although some farmers are willing to certify they are not known with the possibilities and expressed that they also have the impression that there are no demand side actors interested enough. They also expressed the necessity to analyze how (currently lacking) government policies can sustain the trend towards certification.

After a second day of discussion of the detailed projects, in which 5 project members from the University of Lampung participated, the workshop was organized the third day. The workshop was attended by more than 80 representatives of science, governments, NGOs, certifying partnerships, and farmer's organizations.

**Program Agenda of the International Workshop on**

"**Certifying Partnerships for Sustainable Agricultural System (CP-SAS)**"

**Tuesday, February 28, 2012 at 9-13 WIB**

Aula Hall of College of Agriculture, University of Lampung

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda: Topics and Speakers</th>
<th>Person-in-charge</th>
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<tr>
<td>08.30 – 09.00</td>
<td>Registration</td>
<td>Administration</td>
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| 09.00 – 09.10 | Opening Remarks: Prof. Dr. Wan Abbas Zakaria  
Dean, College of Agriculture of UNILA |                            |
| 09.10 – 09.30 | Keynote Speech:  
“UNILA commitment to promote sustainability”  
(Prof. Dr. Hasriadi Mat Akin, Vice Rector I of UNILA) |                            |
| 09.30 – 10.00 | Coffee break                                                                               | Administration            |
| 10.00 – 10.10 | Main Session: Introduction to the workshop theme,  
(Prof. Dr. Bustanul Arifin, Agribusiness-UNILA) | Rapporteur:  
Ms. Firda Sari  
Ms. Novi Rosanti |
| 10.10 – 10.30 | 1. Certifying Partnership: Challenges for the South  
(Pieter Glasbergen, Maastricht University) |                            |
The very lively discussion concentrated on certification, the opportunities and risks, as well as the role of NGOs and governments. The institutional systems approach and the types of PhD projects were seen as a very promising. Representatives of governments, NGOs, certifying partnerships, and farmer's organizations expressed their willingness to participate in the program and its multi-stakeholder workshops.

The last day, project members met to work out the projects, they had a meeting with a representative from agribusiness to discuss recent trends in palm oil certification, and they discussed with Prof. Santoso (Gadjah Mada University) his role in two of the projects.

b. Level of co-operation

- The program has the full support of the three main participating universities: Maastricht University, the University of Lampung, and Gadjah Mada University.

- Cooperation takes place at the level of Faculties and research institutes. At Maastricht University, the Faculty of Humanities and Science, research institute ICIS; at the University of Lampung, the Department of Agricultural Economics/Agribusiness and the Government Science Department, Faculty of Social and Political Sciences; and at Gadjah Mada University, the Department of Politics and Government, Faculty of Social and Political Science.

- Cooperation also takes place at the level of joint teaching activities for all PhD's on the topic of sustainability assessment methods.

- Master students from the participating universities will be given the opportunity to write their master thesis in the program.

- Undergraduates from the University of Lampung will assist in field work of the PhD's (interviewing, etc.).

- Exchange possibilities for staff (researchers and teachers) will be investigated in the course of the program.

c. Prior scientific collaboration between the research groups

Prior collaboration is limited to the Government Science Department, Faculty of Social and Political Sciences, University of Lampung, and the Department of Politics and Government, Faculty of Social and Political Science Gadjah Mada University.
d. Linkages with other national, regional and international research initiatives or research groups

The research on global certifying partnerships builds upon the many international contacts of the Utrecht-Nijmegen Programme on Partnerships and ICIS. Among them the international researchers active in the communities of Multi-Organizational Partnerships, Alliances and Networks (MOPAN); and NPO-BUS-Partnership researchers.

12. Stakeholder participation (communication and dissemination)  
(Max. 500 words)

The workshop that took place at the University of Lampung (February 28th, 2012) as part of the development of the joint research program, was attended by more than 80 representatives of science, governments, NGOs, certifying partnerships, and farmer’s organizations. The discussion in this workshop made it very clear that the research questions and objectives of this joint research program are important for actors from different societal domains. Representatives of governments, NGOs, certifying partnerships, and farmer’s organizations clearly expressed their willingness to participate in the program and its multi-stakeholder workshops.

Therefore, the research program foresees in a yearly multi-stakeholder workshop at the University of Lampung wherein stakeholders (representatives of agriculture, NGOs, businesses, science, and governments) will be involved to discuss interim results of the postdoc and the PhDs projects.

The research program will also communicate with stakeholders trough its website and newsletters. The website (using web 2.0 technology) aims to establish a virtual community (learning network) of researchers, stakeholders and others interested in global certifying partnerships for agricultural commodity chains. This virtual community can easily be organised in groups interested in specific agricultural commodities such as coffee, palm oil, cacao, spices, and aquaculture, or groups focusing on specific issues such as certification schemes, livelihood issues, land use conflicts, or groups interested in crosscutting topics such as joint knowledge production in global certifying partnerships, sustainable agricultural systems, et cetera. The ambition is to develop a virtual community that will be self-sustaining after the lifespan of this joint research program.

13. Joint activities (Max. 1000 words)

The institutional systems perspective of the joint research program (JRP) – see Figure 1 – aims for the development of a truly academic community that consists of five PhD students, one postdoc fellow, a team of supervisors and co-supervisors, and external experts as advisors. Although each PhD project studies a specific topic, together they improve our knowledge about the system as a whole. The postdoc project will intensively cooperate with the PhD projects, tap into their research activities and results, and will ensure the integration of the PhD projects. The overall planning and milestones of the research program and the individual research projects contribute explicitly to the establishment of a joint scientific environment that demands for high quality and inspires PhD students to the best of their abilities. Against this background the following joint activities can be distinguished.

Joint teaching program
The PhD students and postdoc fellow will start as a class at Maastricht University (first 6 months) in a teaching program that focuses on research on partnerships in global governance and development, methods and tools for sustainability assessment, and academic skills (reading, writing, presenting, project management, etc.). This tailor made teaching program will be developed by the supervisors and co-supervisors from the University of Lampung, Gadjah Mada University, Maastricht University, and wherein also the participation of staff from both universities and other experts is foreseen. The quality of the joint teaching program will be monitored by the Maastricht University Graduate School of Sustainability Science (MUST, http://www.icis.unimaas.info/education/must/).

Joint research activities
The PhD students and postdoc fellow will jointly work on basic papers (1st year) on the intervention logics of the certifying partnerships of relevance in the program, the characteristics of global agricultural commodity chains central to this program, and the agricultural systems under review in relation to society and environment.

In the 2nd and 3rd year the PhD students and postdoc will present their project results to the whole class at the University of Lampung, discussing the contributions of their knowledge to a better understanding of the system as a whole, and what this implies for the next steps in their research.

The 1st, 2nd and 3rd year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the research projects. The organization of the multi-stakeholder workshops is a joint responsibility of the PhD students and will be coordinated by the postdoc fellow.

Furthermore, undergraduates from the University of Lampung, Gadjah Mada University and the University of Maastricht will assist in field work of the PhD's (interviewing, etc.), and master students from the universities will be given the opportunity to write their master thesis in the program.

**Joint products**
In the 1st year the PhDs and postdoc will jointly develop working papers. The development of materials for the multi-stakeholder workshops (posters, leaflets, pp-presentations, etc.) is a joint responsibility of the PhD students and postdoc fellow, under supervision of the staff from the universities. The publication of research results at the project website is a joint activity, as well as the development of the yearly newsletter.

**Joint outreach activities**
The 1st, 2nd and 3rd year will be concluded with a multi-stakeholder workshop at the University of Lampung wherein stakeholders (representatives of agriculture, NGOs, businesses, science, and governments) will be involved to discuss the project results. Taking the systems approach as the perspective for the multi-stakeholder workshops opens the opportunity to present the variety of projects in one single setting. Furthermore, it is the intention to organize a workshop in the Netherlands (3rd year) in cooperation with the Wageningen research program of Dr. Hospes.

**Joint responsibilities**
The overall management of the research program is a joint responsibility of the project leaders from the University of Lampung and Maastricht University. Supervision of individual PhDs is also a joint responsibility of staff members from both universities, supplemented with supervisors from other universities in the Netherlands and Indonesia. Yearly meetings, especially in the 2nd and 3rd year, are planned for the whole team of supervisors/co-supervisors and all PhD students and the postdoc fellow involved in the research program.

Furthermore, the PhD students will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, [http://www.icis.unimaas.info/education/must/](http://www.icis.unimaas.info/education/must/)), with the research base at ICIS, Maastricht University. In Indonesia, the supervision of the PhDs will be embedded in the Department of Agricultural Economics/Agribusiness at the University of Lampung. Both institutions have the full support of their universities to collaborate in this joint research program.

**Joint dissemination**
Scientific papers to be published in an international journal are the joint responsibility of the PhD student and the supervisors from participating universities. The project leaders will investigate the possibility to publish a special issue in a journal about the main results of this research program.

The joint research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

The program will develop its own website and publish a yearly newsletter. This website will be based on a learning network approach (using web 2.0 social software technology) to enhance collaboration and social learning. The aim is to create a virtual community of researchers, stakeholders and others interested in (scientific) issues concerning global certifying partnerships for agricultural commodity chains. This website will be an open resource for knowledge exchange and cooperation. The idea is that the virtual community will be self-sustaining after the lifespan of the research program.
14. Information on the managing capacities of the Programme Coordinator
(Max. 250 words)

The Program Coordinator was the first professor of environmental policy in the Netherlands (Open University, 1987, Utrecht University, 1989). He successfully developed a social scientific environmental bachelor and sustainable development master program (track Environmental Policy and Management) at Utrecht University.

He is also the founder of the social scientific long distance teaching program in the bachelor and master program Environmental Sciences at the Netherlands Open University.

At Utrecht University he founded the research program Governance for Sustainable Development. Since 2005 he chairs the Utrecht-Nijmegen Programme on Partnerships; a collaboration of Utrecht University and Radboud University Nijmegen (www.unpop.nl).

He was co-founder and member of the board of the Copernicus Institute for Sustainable Development and Innovation at Utrecht University 2000-2010.

He was appointed as honorary professor at Maastricht University at 1-9-2011.

Next to his ongoing teaching on Partnerships for Sustainable Development in the Utrecht master program, he teaches a course on Governance for Sustainable Development in the Maastricht master program Sustainability Science and Policy.

The managing capacities also become visible through invited guest professorships (i.e. Costa Rica, India, the USA, and Australia), the many invitations for presentations and keynote addresses at international conferences (16 since 2000) and the scientific grants he got in his research program by the Netherlands Scientific Research Council and others (over one million Euros last ten years).

Over the same period (2000+) he successfully supervised 13 PhD students. Currently he supervises 4 PhD students who will finish their studies in 2012 (2 from South Africa) and 2013.

15. Time table of the programme and Milestones

The planning and milestones of the joint research program (and its individual research projects) contribute explicitly to the establishment of a truly academic community of PhD students, postdoc fellow, supervisors/co-supervisors, and advisors. The following activities are milestones in the implementation of the program (see figure below).

<table>
<thead>
<tr>
<th>Time table of the program and Milestones</th>
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<tbody>
<tr>
<td><strong>Year 1</strong></td>
</tr>
<tr>
<td>Kickoff meeting for all PhD students, the postdoc, and supervisors at Maastricht University</td>
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<tr>
<td>Joint teaching program for all PhD students (and postdoc) at Maastricht University</td>
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<tr>
<td>Launch program website for joint knowledge production and dissemination</td>
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<tr>
<td>Joint research papers PhD students and postdoc (1st working papers)</td>
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<tr>
<td>Operational individual research plan PhD students (must be accepted at end of year 1)</td>
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<tr>
<td>Multi-stakeholder workshop at Lampung University to discuss research projects</td>
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<tr>
<td><strong>Year 2</strong></td>
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<tr>
<td>Field work PhD students in Indonesia; postdoc fellow sustains field work Phds</td>
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<td>Master class at Lampung University to discuss progress, results, and next steps</td>
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<tr>
<td>Phds and postdoc publish individually their 1st paper in an international journal</td>
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<tr>
<td>Multi-stakeholder workshop at Lampung University to discuss research results</td>
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<td><strong>Year 3</strong></td>
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<td>Field work PhD students in Indonesia; postdoc fellow sustains field work Phds</td>
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<td>Master class at Lampung University to discuss progress, results, and next steps</td>
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<td>Phds publish individually their 2nd paper in an international journal</td>
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<td>Year 4</td>
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Part II:

| JRP Sub-Projects |

**PROJECT 1 (21-SPIN-JRP-1)**

1. **Project title:** Social and economic effects of coffee certification

2. **Research Group**

   a. **Project Leader in the Netherlands**
   
   Name / Title(s): Prof. Pieter Glasbergen
   
   University / Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, [http://www.icis.unimaas.info/](http://www.icis.unimaas.info/)

   b. **Project Leader in Indonesia**
   
   Name / Title(s): Prof. Bustanul Arifin
   
   University / Institute: Department of Agricultural Economics/Agribusiness
   
   University of Lampung (UNILA), [http://www.unila.ac.id](http://www.unila.ac.id)

   c. **Proposed Researcher:** SPIN PhD fellow

   If known: To be decided

   Name / Title(s):
   
   University / Institute:
   
   Address:
   
   Tel.:
   
   Fax:
   
   E-mail:
   
   O Male  O Female

   d. **Other participants**

   Name / Title(s): Dr. Hanung Ismono (co-supervisor)
   
   University / Institute: Department of Agricultural Economics/Agribusiness
   
   University of Lampung (UNILA), [http://www.unila.ac.id](http://www.unila.ac.id)

   Name / Title(s): Dr. Ron Cörvers (co-supervisor)
   
   University / Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, [http://www.icis.unimaas.info/](http://www.icis.unimaas.info/)

   Name / Title(s): Dr. Surip Mawardi (advisor)
   
   University / Institute: Indonesian Coffee and Cocoa Research Institute (ICCRI)
Research Proposal

3. Summary of the Project Proposal (Max. 400 words)  

The coffee production system in Indonesia is mainly characterized by smallholder production (90%). It is also a sector with several (competing) global certifying entities, some of which have a partnership structure. The partnerships generally require establishment of farmers’ organizations and locally adopted conduct. However, many of these standards provide no guarantee that direct benefits, particularly price premiums, would reach farm laborers or local communities. The specific objectives of the proposed studies are: (1) to examine farmers’ perception on various attributes of the intervention logics of global certifying partnerships in coffee; (2) to analyze how the intervention logics of global certifying partnerships change the agricultural system, in terms of production, processing, and trading of coffee; and, (3) to determine the relative importance of livelihood effects of certifying partnerships to the farmers compared to the changes in agricultural practices.

Research will take place in two regions, comprising the two main coffee varieties: Robusta coffee in the Province of Lampung (Sumatra), and Arabica coffee in Toraja Highlands of South Sulawesi. Non-certified farmers will act as a control group within these regions. Conjoint analysis and frame-analysis are used to measure the various attributes of farmer’s decision making in adopting the global certification. The statistical technique of ordered probit analysis is used to measure the degree of significance of farmers’ decisions about the certification. System analysis, which consists of principal component and agricultural economic analysis, are applied in research on the other research questions. Principal-component analysis (PCA) is used to measure the significance of determinant factors that affect the performance of the intervention logics of coffee certification schemes in the field. Agricultural economic analysis focuses on the production system, processing system and distribution system. Qualitative research takes place in participatory multi-stakeholder workshops and through semi-structured interviews with main stakeholders in the palm oil chain.

This project will contribute to the improvement of the knowledge on the social-economic effects of global certifying partnerships on coffee, particularly on smallholders growing Robusta and Arabica coffee. The project will also contribute to methodological improvements regarding measuring the effects of coffee certification by combining quantitative methods of estimating the significance of different attributes, measuring the degree of economic benefits and social livelihood effects, estimating the efficiency level and market integration of different coffee distribution systems, and qualitative interviews, focus groups and multi-stakeholder workshops.

4. Detailed description of the Project (Max. 2000 words)  

4a. Scientific Background

In the coffee sector, global sustainability partnerships have developed for the most part within voluntary initiatives, involving collective formulation by some stakeholders, outside the framework of government bureaucracy. These groups share common interests on a specific agenda, such as consumer awareness on public health, fertilizer and pesticide contamination, organic perspectives, and other interests to protect endangered species, biodiversity, and other functions of the natural environment. These partnerships originated from the initiatives of private companies and NGOs, based mainly in affluent consuming countries in the North, aiming at developing various environmental compliance systems enacted throughout global coffee supply chains. Supply chain verification schemes are currently used for Indonesian coffee, including ‘organic’, ‘Fairtrade’, ‘Rainforest Alliance’, ‘Utz’, and ‘Starbucks CAFÉ Practices’, all of which attempt to address environmental (and social) concerns at sites of production through market signals sent by buyers along the supply chain. The latest certifying partnerships introduced to the Indonesian coffee sector is ‘4C’ (Common Code for the Coffee Community), which intends to foster sustainability in the ‘mainstream’ green coffee chain and to increase the quantities of coffee meeting basic sustainability criteria of economics, environment, and social. Nevertheless, these global partnerships in the coffee sector are sometimes viewed as a competition among
coffee buyers in the North to ensure the sustained coffee supply from the producing countries in the South. When coffee producing countries were very disappointed by a record low of coffee price at the global market in 2001, and when several questions on ‘cartel of global buyer’ or oligopolistic market structures remain unanswered, one should expect an immediate compliance with the new code from coffee producing countries, which consist of mostly developing countries in the South. For example, just a few months before the declaration of the ‘4C’, some coffee producing countries were fighting for ‘export retention’ to increase the price through the Association of Coffee Production Countries (ACPC). The collapse of ACPC is almost similar to the story of International Coffee Agreement (ICA) and some national coffee boards in the 1990s, after the organizations were not able to fight against the dominant power of global buyers (Ponte, 2002; Muradian and Pelupessy, 2005).

Indonesia is the fourth largest coffee producer, after Brazil, Vietnam, and Columbia, but the second largest Robusta coffee producer after Vietnam. Coffee production in 2011 was about 600 thousand tons, mostly shipped for the global market to generate export earnings of US $ 1,16 million. The total area of coffee farms in Indonesia was estimated about 1,3 million hectares, spread from the most western Province of Aceh in the island of Sumatra, Java, Sulawesi, Bali and Nusa Tenggara, and the eastern island of Papua. About 85 percent of coffee production in Indonesia is Robusta, which is mostly coming from the production centers in Lampung Province; while the remaining 15 percent is Arabica Coffee, produced in highland area of Aceh, North Sumatra, Toraja in South Sulawesi, Kintamani Highland of Bali and Bajawa regions of Flores islands.

With the exception of a number of large government-owned estates (PTPNs) in East Java, coffee is predominately grown by smallholder farmers. The average coffee farmer cultivates a plot ranging from 0.5 to 2 hectares, in an isolated region with poor access to social services, and with an income that causes them to oscillate either side of the poverty line (depending on conditions in world commodity markets). Coffee farming performs an important social security function across Indonesia by injecting cash into many otherwise impoverished rural areas with few other employment options (Arifin et al, 2008).

The average yield of Robusta coffee in Indonesia is 625 kg/ha, far below that in Vietnam and Brazil, which has reached about 3 ton/ha. Growth in the Indonesian coffee sector, however, has occurred primarily through access to cheap (forested) land, resulting in reasonable farm profits without the need to invest in agricultural technologies. However, strategies to improve the coffee productivity by applying more intensive production methods do not necessarily reduce the demand for new land. The case of coffee farming in the forest frontiers of Lampung and Aceh indicate the opposite, where increased productivity can drive deforestation as new migrants gravitate to areas of high coffee productivity (Arifin, et al, 2008). Hence, the nexus of technological change and deforestation in the coffee sector has led to misguided policy recommendations to develop and implement rigorous chain of custody controls, such as recommended by WWF in 2007 after the case of deforestation in Lampung and other regions in Southern Sumatra. A negative campaign to blame illegal coffee producers for the loss of tiger in the Bukit Barisan Selatan (BBS) National Park in the province further complicates the problems, as the current coffee supply chain cannot guarantee the workability of price transparency, asymmetric structures of coffee markets, etc. (Arifin, 2010).

In general, the coffee harvest system varies by regions, but is mostly rudimentary. Farmers harvest, pulp, ferment, wash, dry, and sell the bean at farm gate, which is usually collected by traders. Later, these traders send the coffee bean to larger traders and exporters to be shipped to the world market. The certifying partnerships to encourage more sustainable land management practices in Aceh and Toraja have somehow affected the price structure of coffee, although the trend remains unclear. Traders selling the organic coffee could receive a slightly higher price premium, compared to non-certified Arabica coffee, because of a rather direct link with the international coffee specialty market. However, there is no guarantee that the farm-gate price of coffee received by Arabica farmers would increase because the cost of traceability systems to ensure the integrity of the ‘organic’ branding is quite high (Arifin, et al. 2008). Econometric estimates show a quite small impact of the certifying global partnerships on the domestic market structures of coffee in Indonesia, mostly because the price transmission elasticity of global coffee price is also very small (Ogtasari, 2011). Nevertheless, the certifying partnerships have potentials to improve the social capital and the community-cooperative governance in the producing regions as the partnerships generally require establishment of farmers’ organizations and locally adopted conducts.

Recent overview studies show that the knowledge base of certifying partnerships is still very thin, sparse
and fragile in terms of scope, method and depth of coverage (ICT, 2011); there is relatively little known on crucial questions such as the actual effects of standards on producers’ income, livelihoods and the environment (ISEAL, 2008; ICT, 2011); and there is a lack of robust methodologies in determining the effects of certification (KPMG, 2012; ISEAL, 2011; Blackman and Rivera, 2011).

Against this context, the following research questions will be answered in this project:

- How do farmers perceive the various attributes of the intervention logics of global certifying partnerships?
- In what ways and to what extent do the intervention logics of global certifying partnerships change the agricultural system, in terms of production, processing, and trading of coffee?
- What is the relative importance of certification schemes on the livelihood of smallholders?

b. Specific Objective(s)

The specific objectives of the proposed studies are:

- To examine farmers’ perception on various attributes of the intervention logics of global certifying partnerships in coffee.
- To analyze how the intervention logics of global certifying partnerships change the agricultural system, in terms of production, processing, and trading of coffee.
- To determine the relative importance of livelihood effects of certifying partnerships to the farmers compared to the changes in agricultural practices.

c. Workplan

The following research approach and methods are used to answer the research questions.

Conjoint analysis and frame-analysis are used to measure the various attributes of farmer’s decision making in adopting the global certification in coffee and choosing which certification schemes to meet the sustainable development objectives.

Statistical technique of ordered probit analysis is used to measure the degree of significance of farmers’ decisions about the certification.

System analysis, which consists of principal component analysis and agricultural economic analysis, will be used in the following way.

The first step will be the principal-component analysis (PCA), which is used to measure the significance of determinant factors that affect the performance of the intervention of logics of GCPs, i.e. coffee certification schemes in the field.

The second step will be the agricultural-economic analysis among different categories of farmers (join, willing to join, and not join the certification schemes). This agricultural-economic analysis focuses on the production system, processing system and trading/distribution system:

- The production system will be analyzed using a standard method farm-economic analysis, by adopting the Revenue/Cost (R/C) ratio principles. The general rule is if R/C ratio > 1.0, the farming system is considered profitable.
- The processing system will be analyzed using an added value analysis, by comparing some methods of coffee processing, for example between wet processing and dry processing. The degree of added value has to be measured.
- The trading/distribution system will be analyzed using the marketing system analysis and market integration principles. This method will measure the efficiency of different marketing systems (channels) found in the field. The market integration principles measure the degree of vertical market integration and horizontal market integration of coffee marketing in domestic market and international market. Additional measurement of vertical market integration will employ price-transmission elasticity, i.e. the change of coffee price at consumer level on the change of coffee price at farmers’ level.
The integration of the data and specific analysis mentioned above will contribute to the measurement of the livelihood effects of certification on the smallholder farmers.

Research (field work) will take place in two regions: Robusta coffee in the Province of Lampung (Sumatra), and Arabica coffee in Toraja Highlands of South Sulawesi and will take non-certified farmers as a control group within the regions.

Specific observation and more in-depth analysis will be conducted through direct interviews with coffee farmers in the regions using questionnaires. Focus group discussions (FGDs) will be conducted to exercise specific assignment of the attributes that could influence the adoption and farmers’ decision on coffee certification schemes.

Our sampling procedures include: first, a proportional number of farmers in the following clusters will be defined according to the natural resources conservation principles: A group of farmers’ samples will be drawn from coffee farmers with severe environmental degradation and less environmental degradation. Second, from these clusters, another group of farmers’ samples will be drawn from certified and non-certified coffee farming. We expect that in each region the total samples will be about 120 coffee-farm households.

The following indication will be used as a basis of establishing sampling frames in each region. First, observation will be focused on production centers of Robusta coffee, such as the districts of Tanggamus and West Lampung in the Province of Lampung. Similarly, the observation in the Province of South Sulawesi will be focused on the districts of Tana Toraja, North Toraja, and Enrekang as the production centers of Arabica coffee. The names of villages associated with coffee production activities in each district will be collected to determine the proportional basis of sampling method and the number of samples.

A pre-test survey to a limited number of samples as well as focus-group discussion with farmers group will be conducted to obtain the validity and to verify the attributes that influence decision making among farmers to choose the certification schemes or not. Then, an improved questionnaire will be formulated as a guide to implement the complete surveys to all samples.

Additional semi-structured interviews will be conducted to the group of farmers that perform processing activities and some processors that are more commercially oriented. Similarly, more in-depth interviews will be conducted to collector traders of coffee who operate at village level, as well as to medium or large-scale traders operating in the urban area, and wholesalers and exporters in the supply chain.

d. Scientific Relevance

- This project will contribute to the improvement of the knowledge on the social-economic effects of global certifying partnerships on coffee.

- This project combines qualitative approach and quantitative measurements to improve the insights on the performance of coffee certifying schemes in two distinct types of coffee, Robusta and Arabica commodity chain.

- This project will contribute to methodological improvement of measuring the effects of coffee certification schemes to the livelihood welfare of smallholders by combining quantitative methods of estimating the significance of different attributes, degree of economic benefits and social livelihood between certified and non-certified coffee farms, estimating the efficiency level and market integration of different coffee chains.

- Extensive data collection, rigorous analysis and integrated approach taken in this project will contribute to the improvement of policy decisions regarding coffee certification.
5. Participation in a graduate School ('onderzoeksschool'):

The PhD students in this research programme will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, http://www.icis.unimaas.info/education/must/), with the research base in the field of sustainable development at the International Centre for Integrated assessment and Sustainable development (ICIS), and linked to a wide (inter)national network. In MUST, PhD students and post-docs from different nationalities and disciplinary backgrounds work closely together under professional scientific leadership in interdisciplinary teams. MUST offers scientific training and a fruitful learning environment where the exchange of knowledge between younger and more experienced researchers is emphasised and developed. ICIS/MUST is a full member of the Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE, http://www.sense.nl/).

6. Scientific performance of members of the research group(s) (as defined under 2)
(a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

- **International (refereed) journals**
  (include journal impact factors. Mandatory if your proposal is entered in the themes: Infectious diseases and Health or Food, Non-Food and Water Research. Optional for Social and Economic Development)


- **National (refereed) journals**


- **Books or contributions to books**

- Other


- Glasbergen, P., Participation on invitation in a ‘round table discussion’ on The future of UN-partnerships, UN, New York, 5 May 2009.


- Glasbergen, P., Understanding partnerships analytically, invited presentation, Workshop public-private partnerships for sustainability in Europe and beyond: New corporatism or new associationalism, Robert Schuman Centre for Advanced Studies, European University Institute, Florence, 3-4 June, 2008.


- Glasbergen, P., Setting the scene: Reflections on the partnership paradigm, keynote address, chair and coordinator, Colloquium Partnerships for Sustainable Development; The challenge of connecting private and public responsibilities, Royal Netherlands Academy of Arts and Sciences, Amsterdam, The Netherlands, June 2006.

- Glasbergen, P., Partnerships: The new management of natural resources, invited guest lecture, Management Development Institute, Gurgaon, India, 5 October, 2006.


7. Literature references (Max. 1 page)


8. Integration of research and scientific results in the JRP
(Max. 1000 words)

To study the interrelated development and governance problem of global certification the JRP takes an institutional systems perspective (see figure below). This entails a focus on the interrelations between the main actors in the field of research, their activities, and the effects of these activities, while it is assumed that in the short term characteristics of the agricultural production system may constrain any system changes. In this context, this research project contributes to research question 1 of the joint program. This project specifically informs about the constraints and opportunities of smallholder farmers within two contextual dynamic environments: (1) the emergence of global certifying partnerships and (2) the typical coffee farming systems they are part of.

In particular, this project contributes to knowledge on the application of intervention logics of certifying partnerships and the social-economic effects at the farmers’ level in Indonesia. In addition, this project will set a basis for defining options for changes towards more sustainable agricultural systems.
Management and Administration

9. Information on the managing capacities of the Project Leader(s)
(Max. 250 words)

Prof. Glasbergen chairs the Utrecht-Nijmegen Programme on Partnerships, a collaboration of Utrecht University and Radboud University Nijmegen (www.unpop.nl). He was co-founder and member of the board of the Copernicus Institute for Sustainable Development and Innovation at Utrecht University 2000-2010. He was appointed as honorary professor at Maastricht University at 1-9-2011. Next to his ongoing teaching on Partnerships for Sustainable Development in the Utrecht master program Sustainable Development, he teaches a course on Governance for Sustainable Development in the Maastricht master program Sustainability Science and Policy. Since 2000 he successfully supervised 13 PhD students. Currently he supervises 4 PhD students who will finish their studies in 2012 (2 from South Africa) and 2013.

Prof. Bustanul Arifin is professor of agricultural economics in the University of Lampung (UNILA) and teaches courses on agricultural policy analysis, natural resources economics, etc. He is also professorial fellow in the International Center for Applied Finance and Economics of Bogor Agricultural University (InterCAFE-IPB). Since 2006, he has successfully supervised 3 PhD students and currently supervises 5 PhD students. He has served as external examiners for dozens of PhD students in many campuses in Indonesia.
### Duration and Planning

#### 10. Time table of the project and Milestones

**Joint class PhD students**
In the first year the PhD student, together with the other PhDs in the program, will follow three classes at Maastricht University:
- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore the class will jointly work on a basic paper on:
- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the PhD student will work out its own research into an operational research plan in such a way that field work can start in the second year. The research plan must be approved by the supervisors at the end of the first year, and is a prerequisite to continue with the project.

The PhD will also conduct a survey study of the research field (coffee), and publish a working paper.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the detailed research plans.

**Approximate time schedule for the remaining duration of the program**

The second year is dedicated to 8 months of field work in Indonesia. In between all PhD students in the program will meet as a class at the University of Lampung to discuss progress and results. The last 3 months he/she will work on the first paper at Maastricht University. This paper analyzes perceptions and intervention logics on coffee certification schemes in Lampung. The year will be concluded with a multi-stakeholder workshop at the University of Lampung to present and discuss the results.

The third year will follow the same pattern as the previous. He/she will write two papers, one will be based on an analysis of perceptions and intervention logics on coffee certification schemes in South Sulawesi and the other will be a concluding paper on the economic and social effects of coffee certification. The yearly multi-stakeholder workshop will take place at the University of Lampung or another Indonesian University. Furthermore it is the intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program of Dr. Hospes.

The fourth year the PhD thesis will be finished and defended at Maastricht University. It is the intention of the supervisors also to work out the conclusions on the level of the systems approach. The research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

See the timetable below for an overview of the planning and milestones.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Time table workplan</th>
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<tbody>
<tr>
<td></td>
<td>Courses at Maastricht University</td>
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<td></td>
<td>Joint research papers PhD students</td>
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<td></td>
<td>Survey study research field (Coffee), and working paper</td>
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<tr>
<td></td>
<td>Operational research plan (must be accepted at end of year 1)</td>
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<tr>
<td></td>
<td>Multi-stakeholder workshop Indonesia</td>
</tr>
</tbody>
</table>
### Year 2
- Field work in Indonesia
- 1st paper international journal
- Master class Indonesia
- Multi-stakeholder workshop Indonesia

### Year 3
- Finish field work in Indonesia (and in the Netherlands)
- Master class Indonesia
- 2nd and 3rd paper international journal
- Multi-stakeholder workshop Indonesia
- Workshop in cooperation with Wageningen University

### Year 4
- Finish and defend PhD thesis at Maastricht University
- International conference in Indonesia

#### 11. Research location(s)

Research locations include desk research at the University of Lampung and at Maastricht University, and specific field research in the production centers of Robusta coffee in the Province of Lampung, such as the districts of Tanggamus and West Lampung; and the production centers of Arabica coffee in the Province of South Sulawesi, such as the districts of Tana Toraja, North Toraja, and Enrekang.

Intensive consultation and in-depth discussion between the PhD student and the supervisors (as well as the advisor) will take place at Maastricht University (ICIS), and at the University of Lampung (UNILA) or Bogor at Agricultural University (IPB) in Indonesia. To ensure the quality of supervision and to maintain the progress, the supervisors will be involved in the process of field visits to the study sites and in multi-stakeholder workshops in Indonesia.
Part II:

JRP Sub-Projects

Project 2 (21-SPIN-JRP-2)

1. Project title: Social and economic effects of palm oil certification

2. Research Group

a. Project Leader in the Netherlands

Name / Title(s): Prof. Pieter Glasbergen
University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

b. Project Leader in Indonesia

Name / Title(s): Prof. Bustanul Arifin
University/ Institute: Department of Agricultural Economics/Agribusiness
University of Lampung (UNILA), http://www.unila.ac.id

c. Proposed Researcher: DIKTI PhD fellow

If known: To be decided

Name / Title(s):
University/ Institute:
Address:
Tel.:
Fax:
E-mail:
O Male O Female

d. Other participants

Name / Title(s): Dr. Ron Cörvers (co-supervisor)
University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

Name / Title(s): Dr. M. Fadhil Hasan (advisor)
University/ Institute: Institute for Development of Economics and Finance (INDEF)

Research Proposal

3. Summary of the Project Proposal (Max. 400 words)  Word count: 370

The palm oil system in Indonesia is characterized by independent smallholder palm oil farmers and large production units to which smallholders are connected – the Nucleus Estate Smallholder System (NES). The NES system can involve large-scale plantations managed by state owned enterprises (SOEs) and by private enterprises, either pure domestic companies or foreign-affiliated companies. Smallholders under NES system generally have better access to technical assistance, markets, technology etc. Certification is generally easier through the NES system where the nucleus estates are the certified body. In reaction to the main certifying partnership – Roundtable on Sustainable Palm Oil (RSPO) – the Indonesian government recently developed its own certifying system: Indonesian Sustainable Palm Oil (ISPO). The specific objectives of the proposed studies are: (1) to examine farmers’ perception on various attributes of the...
intervention logics of RSPO and ISPO; (2) to analyze how the intervention logics of global certifying partnerships change the palm oil chain; and (3) to determine the relative importance of livelihood effects on smallholders compared to the changes in agricultural practices, among them the prevention of land use conflicts.

This project employs quantitative and qualitative research, focusing on two regions: the Province of Riau in Sumatra, and the Province of East Kalimantan in Borneo. Quantitative research combines conjoint analysis and frame-analysis methods, which will be applied among: (1) smallholder palm oil farmers under NES which are certified; (2) smallholder palm oil farmers under NES which are not-certified; (3) independent smallholder palm oil farmers. Focus group discussions (FGDs) will be conducted to exercise specific assignments of the attributes that could influence the adoption and farmers’ decision on certification schemes. For two regions in Riau and East Kalimantan, we expect to interview the total of 600 smallholder palm-oil farmers and to research 4 to 8 large-scale plantations. The statistical technique of ordered probit analysis is used to measure the degree of significance of farmers’ decisions about the certification. Agricultural-economic analysis focuses on the production system, processing system and trading/distribution system. This project will contribute to our knowledge about the new way of palm-oil production that is promoted by certification. This project also sheds light on the relationship between NES as an organizational arrangement and the types of land-use conflicts related to palm oil farming.

4. Detailed description of the Project (Max. 2000 words)  

Word count: 1570

a. Scientific Background

Unlike the coffee production system, the palm oil system is characterized by independent smallholder palm oil farmers and large production units to which smallholders are connected – the Nucleus Estate Smallholder System (NES). The NES system can involve large-scale plantation managed by state owned enterprises (SOEs) and by the private enterprises, either pure domestic companies or foreign-affiliated companies. Meanwhile, there are two types of smallholder oil-palm farming system in Indonesia: (1) plasma growers which directly connected with large scale plantations under NES system, consisting of 40 percent of the total smallholders, and (2) independent growers which are not connected to large scale plantations or to the NES system, consisting of 60 percent of the total smallholders. Smallholders under NES system generally have better access to technical assistance, markets, technology etc. Certification is generally easier to go through NES system where the nucleus estates are the certified body. However, independent smallholder growers need to have technical assistance from the government.

Since 2007, Indonesia has been the largest Certified Palm Oil (CPO) producer in the world, reaching about 24 million ton of production in 2011 and exporting about 19 million ton to the world market. Rapid expansion of palm oil area of 0.372 thousand hectare per year (about 7 percent per year) in the last decade has occurred at an unclear spatial planning and at the wake of environmental consequences. However, the development of CPO industry in the last decades occurred in unbalanced speed, where the development of private large-scale plantation is faster than that of smallholder palm oil farmers. Moreover, the growth of large-scale plantations under the state-owned enterprises is about stagnant, even tend to decrease. In term of production, the share of smallholders’ plantation was about 36%, amounting to 7.6 million tons of CPO in 2011, while those of state-owned enterprises and private plantation share 12% and 52%, respectively. In terms of land area, the share of smallholders was decreasing to only 41%, while large-scale plantation was increasing to 48%, and the remaining 11% was state-own enterprise. The share of SOEs tends to decrease in the last decade or so.

The development of CPO industry faces many challenges such as: (1) deforestation, where Indonesia has adopted a new policy (a moratorium) on palm oil expansion at the expense of forest area; (2) biodiversity loss, where endangered orangutans, elephants and tigers have been the focal point of campaigns; (3) climate change, where expansion of palm oil plantation in peat lands would generate more greenhouse gases; and (4) land conflicts, where unclear land-use and spatial planning have driven conflicts between smallholder growers, large scale plantations, local communities and indigenous people (Johnston, 2008; Koh and Wilcove, 2008; Hospes et al., 2009).
A global certifying partnership on palm-oil industries has been established in 2005 – Roundtable Sustainable Palm Oil (RSPO) – and intends to answer the above mentioned challenges (Cheyns, 2011; Schouten and Glasbergen, 2011). The RSPO was initiated by stakeholders, primarily Northern-based international NGOs and global companies, food industries and some representatives of stakeholders from producing regions in the South. However, since 2011, the Indonesian Palm Oil Association (IPOA, or locally known as GAPKI) has withdrawn its memberships from the RSPO, stimulating more dynamic challenges for the CPO industry. In reaction to the main certifying partnership – the Roundtable on Sustainable Palm Oil (RSPO) – the Indonesian government recently developed its own certifying system: Indonesian Sustainable Palm Oil (ISPO).

Recent overview studies show that the knowledge base of certifying partnerships is still very thin, sparse and fragile in terms of scope, method and depth of coverage (ICT, 2011); there is relatively little known on crucial questions such as the actual effects of standards on producers’ income, livelihoods and the environment (ISEAL, 2008; ICT, 2011); and there is a lack of robust methodologies in determining the effects of certification (KPMG, 2012; ISEAL, 2011; Blackman and Rivera, 2011).

Against this context the following research questions have been formulated:
- How do farmers perceive the various attributes of the intervention logics of RSPO and ISPO?
- In what ways and to what extent do the intervention logics of global certifying partnerships change the palm oil chain?
- What is the relative importance of livelihood effects on smallholders compared to the changes in agricultural practices, among them the prevention of land use conflicts?

b. Specific Objective(s)

The specific objectives of the project are:
- To examine farmers’ perception on various attributes of the intervention logics of RSPO and ISPO.
- To analyze how the intervention logics of global certifying partnerships change the palm oil chain.
- To determine the relative importance of livelihood effects on smallholders compared to the changes in agricultural practices, among them the prevention of land use conflicts.

c. Workplan

This project employs quantitative and qualitative research, focusing on two regions: the Province of Riau in Sumatra, and the Province of East Kalimantan in Borneo.

Quantitative research combines conjoint analysis and frame-analysis methods, which will be applied among:
1) Smallholder palm oil farmers under NES - which are certified
2) Smallholder palm oil farmers under NES - which are not-certified
3) Independent smallholder palm oil farmers

Qualitative research takes place in participatory multi-stakeholder workshops and through interviews with main stakeholders in the palm oil chain. Specific observation and more in-depth analysis will be conducted through direct interviews with oil palm farmers in the regions using questionnaires. Focus group discussions (FGDs) will be conducted to exercise specific assignments of the attributes that could influence the adoption and farmers’ decision on certification schemes.

For the quantitative research, our sampling procedures include: first, a group of farmers’ samples will be drawn from NES that are certified, and NES that are not-certified. Formal requests to interview the smallholders will be made through the large-scale companies (nucleus), which have performed the partnerships with the smallholders (plasma). Second, a group of independent smallholder palm oil farmers will be interviewed.

We will apply proportional sampling techniques to collect the data and interview smallholder growers and perform in-depth interviews with prominent resource persons in the nucleus companies of large scale palm-oil plantation. Observations will focus on 2 to 4 nucleus companies in NES certified and on at least 100 smallholder palm-oil farmers in the scheme. Similarly, observations will also focus on 2 to 4 nucleus
companies in NES not-certified and on at least 100 stallholder palm-oil farmers in the scheme. In addition, data collection and interviews are also conducted to the independent smallholder to at least 100 palm-oil farmers. Therefore, for two regions in Riau and East Kalimantam, we expect to interview the total of 600 smallholder palm-oil farmers and observing 4 to 8 large-scale plantations. A pre-test survey to a limited number of samples as well as focus-group discussions with farmers group of smallholder growers in NES certified, NES non-certified, and independent growers will be conducted. This pre-test is aimed to obtain the validity and to verify the attributes affecting decision making among smallholder farmers to choose RSPO and ISPO. Then, an improved questionnaire will be formulated as a guide to implement the complete surveys to all samples. 

The following research approach and methods are used to answer research questions.

Desk analysis and semi-structured interviews to examine the differences between RSPO and ISPO, and the consequences of adopting the certification schemes.

Conjoint analysis and frame-analysis are used to measure the various attributes of farmer's decision making in adopting the global certification in palm oil farming and choosing which certification schemes (RSPO and RSPO) to meet the sustainable development objectives.

Statistical technique of ordered probit analysis is used to measure the degree of significance of farmers’ decisions about the certification.

System analysis, which consists of principal component and agricultural-economic analysis, will be applied in the following way.

The first step will be the principal-component analysis (PCA), which is used to measure the significance of determinant factors that affect the performance of the intervention of logics of GCPs, i.e. palm oil certification schemes in the field.

The second step will be agricultural-economic analysis among different categories of smallholder farmers (under NES-certified, under NES-non-certified and independent stallholders). This agricultural economic analysis focuses on the profitability of oil palm production system (fresh fruit bunch, or FFB), processing system (from FFB to crude palm oil-CPO) and trading/distribution system (FFB and CPO). The production system will be analyzed using a standard method farm-economic analysis, by adopting the Revenue/Cost ratio (R/C ratio) principles. The general rule is if R/C ratio > 1.0, the farming system is considered profitable.

The trading/distribution system will be analyzed using the marketing system analysis and market integration principles. This method will measure the efficiency of different marketing systems (channels) found in the field. The market integration principles measure the degree of the vertical market integration and horizontal market integration of marketing in domestic market and international market. Additional measurement of vertical market integration will employ price-transmission elasticity, i.e. the change of coffee price at consumer level on the change of price at farmers' level.

### d. Scientific Relevance

- This project will contribute to our knowledge about the economic and social effects of the new ways of palm oil production that are promoting through certification.
- By analyzing the performance of global certification in the field, this project will clarify the way the certification system has to prove itself regarding the adaptability in current farming practices.
- This project also sheds light on the relationship between NES as an organizational arrangement and the types of land-use conflicts related to palm oil farming.

### 5. Participation in a graduate School ("onderzoeksschool")
The PhD students in this research programme will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, http://www.icis.unimaas.info/education/must/), with the research base in the field of sustainable development at the International Centre for Integrated assessment and Sustainable development (ICIS), and linked to a wide (inter)national network. In MUST, PhD students and post-docs from different nationalities and disciplinary backgrounds work closely together under professional scientific leadership in interdisciplinary teams. MUST offers scientific training and a fruitful learning environment where the exchange of knowledge between younger and more experienced researchers is emphasised and developed. ICIS/MUST is a full member of the Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE, http://www.sense.nl/).

6. Scientific performance of members of the research group(s) (as defined under 2)
(a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

- **International (referred) journals**
  (include journal impact factors. Mandatory if your proposal is entered in the themes: Infectious diseases and Health or Food, Non-Food and Water Research. Optional for Social and Economic Development)

  - Van Zeijl-Rozema, A., Cörvers, R., Kemp, R. and Martens, P. (2008), Governance for sustainable...


**National (refereed) journals**


**Books or contributions to books**


- De Kraker, J., R. Cörvers, P. Valkering, M. Hermans, Christine Ruelle (2011), Potential of social software to support Learning Networks for Sustainable Development, In: A. Barton & J. Dlouhá (eds), *Multi-Actor...*
- **Other**


7. Literature references *(Max. 1 page)*
Integration and Cooperation

8. Integration of research and scientific results in the JRP
(Max. 1000 words)

To study the interrelated development and governance problem of global certification the JRP takes an institutional systems perspective. This entails a focus on the interrelations between the main actors in the field of research, their activities, and the effects of these activities, while it is assumed that in the short term characteristics of the agricultural production system may constrain any system changes. In this context, this research project contributes to research question 1 of the joint program (see the highlight in figure below).
This project specifically:
- informs about crucial components of the overall institutional system approach of the joint program by focusing on palm oil as a very important agricultural commodity that have adopted certification schemes in the last decade or so.
- contributes to our understanding of the facts underlying the dynamic linkages between smallholder growers and large-scale plantation, and to the effectiveness of governance partnerships under NES system in a rapid changing environment of certification systems.
- informs about the constraints and opportunities of smallholder farmers within two contextual dynamic environments: (1) the emergence of global certifying partnerships of RSPO and the national partnerships of ISPO, and (2) the typical nucleus-estate-smallholder (NES) systems of palm oil they are part of.
- contributes to our knowledge on the application of the intervention logics of RSPO and ISPO and the social-economic effects at the smallholder level of palm-oil farmers in Indonesia.
In addition, this project will set a basis for defining options for changes towards more sustainable agricultural systems.

**Management and Administration**

**9. Information on the managing capacities of the Project Leader(s)**
(Max. 250 words)

Word count: **180**

Prof. Glasbergen chairs the Utrecht-Nijmegen Programme on Partnerships; a collaboration of Utrecht University and Radboud University Nijmegen. He was co-founder and member of the board of the Copernicus Institute for Sustainable Development and Innovation at Utrecht University 2000-2010. He was appointed as honorary professor at Maastricht University at 1-9-2011. Next to his ongoing teaching on Partnerships for Sustainable Development in the Utrecht master program Sustainable Development, he teaches a course on Governance for Sustainable Development in the Maastricht master program.
Sustainability Science and Policy. Since 2000 he successfully supervised 13 PhD students. Currently he supervises 4 PhD students finishing their studies in 2012 and 2013.

Prof. Bustanul Arifin is professor of agricultural economics in the University of Lampung (UNILA) and teaches courses on agricultural policy analysis, natural resources economics, etc. He is also professorial fellow in the International Center for Applied Finance and Economics of Bogor Agricultural University (InterCAFE-IPB). Since 2006, he has successfully supervised 3 PhD students and currently supervises 5 PhD students. He has served as external examiners for dozens of PhD students in many campuses in Indonesia.

### Duration and Planning

#### 10. Time table of the project and Milestones

**Joint class PhD students**

In the first year the PhD student, together with the other PhDs in the program, will follow three classes at Maastricht University:

- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore the class will jointly work on a basic paper on:

- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the PhD student will work out its own research into an operational research plan in such a way that field work can start in the second year. The research plan must be approved by the supervisors at the end of the first year, and is a prerequisite to continue with the project.

The PhD will also conduct a survey study of the research field (palm oil), and publish a working paper.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the detailed research plans.

**Approximate time schedule for the remaining duration of the program**

The second year is dedicated to 8 months of field work in Indonesia. In between all PhD students in the program they will meet as a class at the University of Lampung to discuss progress and results. The last 3 months he/she will work on the first paper at Maastricht University. This paper analyzes perceptions and intervention logics on RSPO and ISPO certification schemes in Riau. The year will be concluded with a multi-stakeholder workshop at the University of Lampung to present and discuss the results.

The third year will follow the same pattern as the previous. He/she will write two papers, one will be based on an analysis of perceptions and intervention logics on RSPO and ISPO certification schemes in Riau and the other will be a concluding paper on the economic and social effects of palm oil certification. The yearly multi-stakeholder workshop will take place at the University of Lampung or another Indonesian University. Furthermore it is the intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program of Dr. Hospes.

The fourth year the PhD thesis will be finished and defended at Maastricht University. It is the intention of the supervisors to also work out the conclusions on the level of the systems approach. The research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

See the timetable below for an overview of the planning and milestones.
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Courses at Maastricht University</th>
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<tr>
<td></td>
<td>Joint research papers PhD students</td>
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<td>Survey study research field (Coffee), and working paper</td>
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<td>Operational research plan</td>
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<td>(must be accepted at end of year 1)</td>
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<td>Multi-stakeholder workshop Indonesia</td>
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<tr>
<th>Year 2</th>
<th>Field work in Indonesia</th>
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<tr>
<td></td>
<td>1st paper international journal</td>
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<td></td>
<td>Master class Indonesia</td>
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<td></td>
<td>Multi-stakeholder workshop Indonesia</td>
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<table>
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<tr>
<th>Year 3</th>
<th>Finish field work in Indonesia (and in the Netherlands)</th>
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<tr>
<td></td>
<td>Master class Indonesia</td>
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<tr>
<td></td>
<td>2nd and 3rd paper international journal</td>
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<td></td>
<td>Multi-stakeholder workshop Indonesia</td>
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<td>Workshop in cooperation with Wageningen University</td>
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<table>
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<tr>
<th>Year 4</th>
<th>Finish and defend PhD thesis at Maastricht University</th>
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<tbody>
<tr>
<td></td>
<td>International conference in Indonesia</td>
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11. Research location(s)

Research locations include desk research at the University of Lampung and at Maastricht University, and specific field research in the palm oil production centers in the Province of Riau, such as the districts of Pelalawan and Kuantan Singingi. These districts are the centers of public attention for the case of RSPO and ISPO certification, as environmental issues and climate change deals are handled by the Government of Indonesia. Similarly, the field research RSPO and ISPO certification will take place in the Province of East Kalimantan, especially in the Districts of Bulungan and Kutai Timur for similar reasons and the issues of land-use conflicts between plantations and other users such as coal mining and resource conservation.

Intensive consultation and in-depth discussion between the PhD student and the supervisors (as well as the advisor) will take place at Maastricht University (ICIS), and at the University of Lampung (UNILA) or Bogor at Agricultural University (IPB) in Indonesia. To ensure the quality of supervision and to maintain the progress, the supervisors will be involved in the process of field visits to the study sites and in multi-stakeholder workshops in Indonesia.
Part II:

JRP Sub-Projects

Project 3 (21-SPIN-JRP-3)

1. Project title: Institutional economic analysis of global certifying partnerships in Indonesia

2. Research Group

a. Project Leader in the Netherlands

Name / Title(s): Prof. René Kemp
University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

b. Project Leader in Indonesia

Name / Title(s): Prof. Bustanul Arifin
University/ Institute: Department of Agricultural Economics/Agribusiness University of Lampung (UNILA), http://www.unila.ac.id

c. Proposed Researcher: DIKTI PhD fellow

If known: To be decided

Name / Title(s):
University/ Institute:
Address:
Tel.:
Fax:
E-mail:
O Male O Female

d. Other participants

Name / Title(s): Dr. Ron Cörvers (co-supervisor)
University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

Name / Title(s): Prof. Ahmad Erani Yustika (advisor)
University/ Institute: Department of Economics, University of Brawijaya (UB)

Name / Title(s): Prof. Wan Abbas Zakaria (advisor)
University/ Institute: Department of Agricultural Economics/Agribusiness University of Lampung (UNILA), http://www.unila.ac.id
Research Proposal

3. **Summary of the Project Proposal (Max. 400 words)**

The trend towards certification in global agricultural commodity chains involving developing country suppliers is expanding rapidly. While some chains, such as coffee and palm oil, already have a lot of experience with certification, in other chains, including cocoa, spices, and aquaculture, global certifying partnerships (GCPs) are in an early stage of development. The project will investigate the influence of certification on the economic and social performance of 5 agri-commodity chains important for Indonesia: coffee, palm oil, cocoa, spices, and aquaculture. The focus of the project is on the role of formal and informal institutions.

The project will study the institutional mechanisms and institutional environments (internal and external) of global certifying partnerships in the commodity chains. It will examine the institutional characteristics that are required for effective certification in different agricultural commodity chains, and analyze the consequences of institutional arrangements being chosen for realizing the social and economic sustainability objectives of these partnerships.

The project applies a combination of qualitative and quantitative methods. First, the project will identify and categorize the institutional arrangements regarding certification in each agricultural commodity chain and compare these arrangements across agricultural commodity chains. Desk analysis and semi structured interviews will be used to establish the matrices, based on network-mapping techniques. To categorize the institutional arrangements regarding certification, the researcher develops matrices based on, inter alia, actors, rules and relationships (formal and informal), norms and conventions (adapted and enforced). Second, institutional linkages between the arrangements and organizations (government, business, and civil society organizations) will be analyzed to examine the potential effectiveness (opportunities and constraints) of global certifying partnerships to the livelihood improvement of smallholder producers of five commodities. Third, for each of the commodity chains, the economic and social performance will be analyzed, allowing us to benchmark the performance of different commodity chains against each other, to determine efficiency gains at different points of the chains. Finally, the project will engage in transaction cost analysis, scenario analysis and the use of game theory to obtain deeper insights into interaction effects.

This project will contribute to the improvement of the knowledge of the effective design of institutional arrangements of global certifying partnerships on agricultural commodity chains, taking cases from coffee, palm oil, cocoa, spices, and aquaculture products. More specifically, the project will make a significant contribution in clarifying the relationship between transaction costs, “the quality” of institutions, and the livelihood effects on smallholder producers.

4. **Detailed description of the Project (Max. 2000 words)**

a. **Scientific Background**

The project will apply institutional theory and methods of analysis to study the performance of certified commodity chains of agro food products in which Indonesian farmers are involved. The basic principles in studying the institutional mechanisms rest on the meaning and scope of institutions as a set of rules for going concerns, as viewed by both old institutional economics and new institutional economics (Coase 1937, 1960; North, 1990, 1994; Williamson, 1985, 1994, 2000). Norms and conventions are accepted regularities in behavior, which, though not written, bring order and predictability to human relationships. The enforcement of norms and conventions tends to reside close to the individual, so the role of codes of conduct is very important. Norms and conventions must be distinguished from the class of institutions for which there exist formal (codified) enforcement mechanisms. Therefore, compliance processes must be set up to enforce conformance with an evolved norm, in other words, working rules. This is actually an extension of social capital, which includes norms, trust, and individual interactions with others in both informal networks and formal civic organizations. This set of institutional economic approach applies transaction-cost principles, believing that every economic exchange is a process that
entails costs, which are not clearly documented in the literature. Thus, studies that contribute to the quantitative analysis of the transaction costs of existing and potential collective actions derived by or developed through the emergence of certifying global partnerships are clearly important.

In this project, institutions are the social relations that frame the activities of production, consumption, and exchange, acting as a structure within which individual action in the economy takes place (Setterfield 1993, 756). Institutions bring order to everyday life to guide human interaction and delineate the framework within which human interaction takes place (North 1990; Denzau and North 1993). Economic performance is linked to institutional issues, but of course economic performance cannot be explained by institutional factors alone, as economic performance depends on capabilities, resources and external factors, but institutions act as an important intermediating factor. Through a comparative analysis, we can determine the influence of different institutional mechanisms. The project will draw on and contribute to studies of institutional change. It will study the extent to which new institutions replace older ones, or complement them. Here we will draw on important new work of Mahoney and Thelen (2010) offering a typology of institutional change:

1. Layering, or the introduction of new rules on top of or alongside existing ones,
2. Conversion, or the changed enactment of existing rules due to their strategic deployment,
3. Drift or the changed impact of existing rules due to shifts in the environment, and
4. Displacement or the removal of existing rules and the introduction of new ones.

Through a comparative institutional analysis, this project aims to contribute to our knowledge on the adaptation and implementation of certifying arrangements for coffee, palm oil, cocoa, spices, and aquaculture.

The following research questions have been formulated:
- What are the institutional mechanisms (typology of institutions) and institutional environments (internal and external) that contribute to the dynamics of global certifying partnerships in the commodity chains?
- What institutional characteristics are required for effective certification in different agricultural commodity chains?
- What are the consequences of institutional arrangements being chosen for realizing the social and economic sustainability objectives of these partnerships?

b. Specific Objective(s)

The specific objectives of this research are:
- To document the institutional mechanisms (typology of institutions) and institutional environments (internal and external), which contribute to the dynamics of global certifying partnerships in the commodity chains.
- To examine the institutional characteristics that are required for effective certification in different agricultural commodity chains.
- To analyze the consequences of institutional arrangements being chosen for realizing the social and economic sustainability objectives of these partnerships.

c. Workplan

The project applies a combination of qualitative and quantitative methods. First, the project will identify and categorize the institutional arrangements regarding certification in each agricultural commodity chain and compare these arrangements across agricultural commodity chains. This portion of qualitative research takes place in participatory multi-stakeholder workshops and through semi-structured interviews with main stakeholders in the five commodity chains. Desk analysis and semi structured interviews will be used to establish the matrices, based on the network-mapping techniques. To categorize the institutional arrangements regarding certification, the researcher develops matrices based on actors, rules and relationships (formal and informal), norms and conventions (adapted and enforced).

Second, institutional linkages between the arrangements and organizations (government, business, and civil
society organizations) will be analyzed to examine the potential effectiveness (opportunities and constraints) of global certifying partnerships related to the livelihood improvement of smallholder producers of five commodities.

Third, based on the information of the first two steps, the project will analyze the institutional fitness to the farmers’ organization of five commodities that could have potentials to livelihood improvement of smallholder producers.

Semi-structured interviews with key informants and resource persons will be conducted in this project where methods of institutional economics analysis (analysis of contracts, transaction costs, principal-agent relationships, and social capital, and institutional changes) will be employed.

Here, the locus is the production system, processing, and trade/distribution activities of all five agri-commodity chains. Therefore, the quantitative portion of this project will collect the basic data on the production, processing, and trade/distribution using questionnaires consisting of among others demographic characteristics, social-economic conditions of the economic actors (producers, processors, and traders of all five commodities) as well as other related information on written and unwritten contracts/agreements that influence the flow of commodities. The questionnaire will also be used to study the concerns and beliefs of individual actors. With the help of Q methodology, such beliefs can be aggregated into meaningful social groups (e.g., those that are pro-innovation and pro-market, traditionalists and those willing to try something new). Such knowledge is of great benefit to attempts to manage change: it helps to identify actors that can be enrolled into specific change processes and will offer cues for how to do this (based on knowledge of the actors’ improvement perspectives).

Finally, scenario analysis, game theory and appropriate statistical analysis will be used to estimate the transaction costs of economic activities from the producers to consumers in the agri-commodity chains. These quantitative analysis will examine the consequences of institutional arrangements being chosen for the sustainability objective of the GCPs and for the welfare of smallholders in all five commodity chains.

d. Scientific Relevance

- This project will contribute to the improvement of knowledge about the effective design of institutional arrangements of global certifying partnerships in agricultural commodity chains, taking cases from coffee, palm oil, cocoa, spices, and aquaculture products.

- This project combines a qualitative approach and quantitative measurements to improve the insights on the performance of institutional arrangements of certifying schemes in agricultural commodity chains.

- This project will contribute to methodological improvement of explaining institutional changes underlying the evolution of certifying partnerships as well as the governance performance of agricultural commodity chains.

- Quantitative approach and data collection on the dynamics of five agricultural commodity chains, rigorous analysis and integrated approach taken in this project will contribute to the improvement of policy decisions regarding coffee certification.

- Finally, the project will make a significant contribution to the clarification of the relationship between transaction costs, “the quality” of institutions, and the livelihood effects on smallholder producers.
5. Participation in a graduate School ('onderzoeksschool'):

The PhD students in this research programme will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, http://www.icis.unimaas.info/education/must/), with the research base in the field of sustainable development at the International Centre for Integrated assessment and Sustainable development (ICIS), and linked to a wide (inter)national network. In MUST, PhD students and post-docs from different nationalities and disciplinary backgrounds work closely together under professional scientific leadership in interdisciplinary teams. MUST offers scientific training and a fruitful learning environment where the exchange of knowledge between younger and more experienced researchers is emphasised and developed. ICIS/MUST is a full member of the Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE, http://www.sense.nl/).

6. Scientific performance of members of the research group(s) (as defined under 2) (a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

- International (refereed) journals
  (include journal impact factors. Mandatory if your proposal is entered in the themes: Infectious diseases and Health or Food, Non-Food and Water Research. Optional for Social and Economic Development


- **National (refereed) journals**

- **Books or contributions to books**

- **Other**
Bogor: World Agroforestry Centre.

7. Literature references (Max. 1 page)


Integration and Cooperation

8. Integration of research and scientific results in the JRP
(Max. 1000 words)  

Word count: 193

This project highlights crucial components of the overall institutional system approach of the joint program by focusing on the institutional institutional mechanisms (typology of institutions) and institutional environments (internal and external) that contribute to the dynamics of global certifying partnerships (GCPs) in the supply chains commodities have adopted certification schemes in the last decade or so (see the highlight in the figure below).
This project contributes to the knowledge on the application of institutional arrangements of certifying partnerships and the social-economic effects at the farmers’ level in Indonesia. In addition, this project will set a basis for defining options (in particular in the perspective of economic actors and policy makers) for changes towards more sustainable agricultural systems.

This project will contribute to the knowledge on the relationships between transaction costs, efficiency analysis, market structure and market integration analysis for all five agro commodity chains and the institutional characteristics required for effective certification.

Finally, this project contributes to the knowledge on the consequences of different institutional arrangements of GCPs for the sustainability objective and the welfare of smallholders in the agri commodity chains.

**Management and Administration**

**9. Information on the managing capacities of the Project Leader(s)**

(Max. 250 words)  

Word count: **231**

René Kemp is a professor of Innovation and Sustainable Development at ICIS at Maastricht University and professorial fellow of UNU-MERIT in Maastricht. René Kemp has a broad range of expertise, covering various sectors (manufacturing, transport, energy, waste) – involving multiple methods of analysis. He views the world from an *evolutionary institutionalist* perspective and is one of the most cited innovation researchers (h-index of 26). He is advisory editor of *Research Policy* (the world-leading innovation journal), editor of *Sustainability Science* and editor of the new journal *Environmental Innovation and Societal Transitions*. 
Prof. Bustanul Arifin is professor of agricultural economics in the University of Lampung, Indonesia. He is also professorial fellow in the International Center for Applied Finance and Economics of Bogor Agricultural University (InterCAFE-IPB). His research interests include agricultural policy, food security, institutional economics and sustainable development strategies. Professor Arifin is currently serving as a Chairman of Expert Group of the National Food Security Council and a member of National Innovation Council, both under the President of Republic of Indonesia.

Dr. Ron Cörvers is associate professor in governance and sustainable development, and education director at ICIS, Maastricht University. He is chair of the MUST PhD program. He managed EU projects on (e)learning and sustainable development. He teaches in environmental policy, governance and sustainable development. His research interests are in the field of governance and sustainable development, and technology enhanced learning for sustainable development.

### Duration and Planning

**10. Time table of the project and Milestones**

**Joint class PhD students**
In the first year the PhD student, together with the other PhDs in the program, will follow three classes at Maastricht University:
- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore the class will jointly work on a basic paper on:
- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the PhD student will work out its own research into an operational research plan in such a way that field work can start in the second year. The research plan must be approved by the supervisors at the end of the first year, and is a prerequisite to continue with the project.

The PhD will conduct a literature study, document analysis, and probably interviews stakeholders of five commodities (coffee, palm oil, cocoa, spices, and aquaculture) in the North or mostly European countries to obtain insights of the institutional arrangements of the chains. Main emphasis is on the understanding the school of thoughts in the institutional economic theory (both evolutionary economics and new institutional economics) to apply the approach on the diverse certifying partnerships of the five commodities.

Deliverable: Working Paper (First paper), on “Survey of literature on institutional economics and institutional analysis methods applicable for certifying partnership schemes and the evolution of governance issues in both”

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the detailed research plans.

**Approximate time schedule for the remaining duration of the program**

The second year is dedicated to 8 months of field work and participatory workshops.

Conducting participatory multi-stakeholders workshop at the University of Lampung and Maastricht University with representatives of government, business, NGOs to finalize the tools and methods of institutional economic analysis applicable for five commodity chains.

Field work in the Province of Lampung for coffee, cocoa, spices, and aquaculture (Districts of West Lampung, North Lampung, South Lampung and Mesuji), and in the Province of Riau for palm oil (District of...
Palawan and Kuantan Singingi).

Research focus:
- Identification of the institutional mechanisms (typology of institutions) and institutional environments (internal and external) that contribute to the dynamics of GCPs in the supply chains commodities.
- Conducting transaction costs, efficiency analysis, market structure and market integration analysis for all five agri-commodity chains to obtain insights of institutional characteristics required for effective certification.

In between all PhD students in the program will meet as a class at the University of Lampung to discuss progress and results.

The last 3 months he/she will work on the following paper at Maastricht University. Deliverable: International publication (Second paper) on “Institutional arrangements of certifying partnerships in five agricultural commodity chains in Indonesia.”

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to present and discuss the results.

The third year will follow the same pattern as the previous. Field work in the Province of South Sulawesi for coffee, cocoa, and aquaculture (Districts of Tana Toraja, North Toraja and Enrekang) and North Sulawesi (Districts of Minahasa Utara for aquaculture) and in East Kalimantan (Districts of Bulungan and Kutai Timur for palm oil).

Research focus:
- Identification of the institutional mechanisms (typology of institutions) and institutional environments (internal and external) that contribute to the dynamics of GCPs in the supply chains commodities.
- Conducting transaction costs, efficiency analysis, market structure and market integration analysis for all five agro commodity chains to obtain insights of institutional characteristics required for effective certification.
- Perform scenario or simulation analysis to assess the consequences of different institutional arrangements of GCPs for the sustainability objective and the welfare of smallholders in the agri-commodity chains

Presenting the results in an international conference and organizing the progress workshop at the University of Lampung and Maastricht University.

The last 3 months he/she will work on the following paper at Maastricht University. Deliverable: International publication (Third paper) on “Institutional changes required for effective institutional arrangements of five commodities”

The yearly multi-stakeholder workshop will take place at the University of Lampung or another Indonesia University. Furthermore it is the intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program of Dr. Hospes.

The fourth year the PhD thesis will be finished and defended at Maastricht University. It is the intention of the supervisors also to work out the conclusions on the level of the systems approach.

The research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

See the timetable below for an overview of the planning and milestones.
### Year 1
- **Courses at Maastricht University**
- **Joint research papers PhD students**
- **Survey study research field (Institutional economics), and working paper (first paper)**
- **Operational research plan (must be accepted at end of year 1)**
- **Multi-stakeholder workshop Indonesia**

### Year 2
- **Multi-stakeholders workshops in the Netherlands and Indonesia with representatives of government, business, NGOs**
- **Field work in Indonesia**
- **Paper international journal (second paper)**
- **Master class Indonesia**
- **Multi-stakeholder workshop Indonesia**

### Year 3
- **Finish field work in Indonesia (and in the Netherlands)**
- **Master class Indonesia**
- **Paper international journal (third paper)**
- **Multi-stakeholder workshop Indonesia**
- **Workshop in cooperation with Wageningen University**

### Year 4
- **Finish and defend PhD thesis at Maastricht University**
- **International conference in Indonesia**

## 11. Research location(s)

Research locations include desk research at the University of Lampung and at Maastricht University, and specific field research in production centers of five commodities: Coffee in the Provinces of Lampung and South Sulawesi; palm oil in Riau and East Kalimantan; spices in Lampung and West Kalimantan; cocoa in Lampung and South Sulawesi; and aquaculture in Lampung and North Sulawesi.

Intensive consultation and in-depth discussion between the PhD student and the supervisors (as well as the advisers) will take place at Maastricht University in the Netherlands and at the University of Lampung (UNILA) or Bogor at Agricultural University (IPB) in Indonesia. To ensure the quality of supervision and to maintain progress, the supervisors will be involved in the process of field visits to the study sites and in multi-stakeholder workshops in Indonesia.
Part II:

JRP Sub-Projects

Project-4 (21-SPIN-JRP-4)

1. Project title: Effective mobilization of non-governmental organizations (NGOs) in global certifying partnerships

2. Research Group

a. Project Leader in the Netherlands

Name / Title(s): Prof. Pieter Glasbergen
University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, [http://www.icis.unimaas.info/](http://www.icis.unimaas.info/)

b. Project Leader in Indonesia

Name / Title(s): Prof. Purwo Santoso
University/ Institute: Department of Politics and Government, Faculty of Social and Political Science, Gadjah Mada University, Indonesia

c. Proposed Researcher: DIKTI PhD fellow

If known:
Name / Title(s): To be decided
University/ Institute:
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Tel.: 
Fax: 
E-mail: 
O Male O Female

d. Other participants

Name / Title(s): Dr. Verena Bitzer (co-supervisor)
University/ Institute: Management Studies Group, Wageningen University

Name / Title(s): Dr. Ary Darmastuti (advisor)
University/ Institute: Government Science Department, Faculty of Social and Political Sciences, University of Lampung, Indonesia.
The initiation of global certifying partnerships in agricultural commodity chains has created new challenges for Indonesian non-governmental organizations (NGOs). In a situation characterized by tensions between economic interests and social values they need to redefine their roles. The objective of this project is to gain insights on how to improve the inclusion of local sustainability values and interests through Indonesian NGOs in global certifying partnerships. Not all NGOs are able or willing to collaborate with businesses in partnerships. Up to now research in this area mainly focuses on Northern-based (international) NGOs and neglects the role of Southern NGOs as mediators between smallholder farmers’ interests and global certifying partnerships. Moreover, hardly any research is available on the relationships between collaborating and campaigning NGOs in a developing context. By addressing these topics, this research will deliver new insights on the roles of NGOs regarding sustainability certification. The project studies the characteristics of the NGO-landscape active in the field of sustainable coffee and palm oil production systems, identifies intervention logics and their relationships, and analyzes in what way and to what extent NGO-strategies regarding global partnerships contribute to the inclusion of livelihood interests in the arrangements and to the empowerment of smallholders. The research combines network analysis with functional analysis and will apply document and literature analysis, focus group methodology, participatory observation, and semi-structured interviews.

4. Detailed description of the Project (Max. 2000 words)  

a. Scientific Background

Last decennium we have seen the initiation of a new model for the governance of agricultural commodity chains in response to severe sustainability challenges. In a new form of partnership, mainly Northern-based businesses and non-governmental organizations (NGOs) took the initiative to define more sustainable production standards and related certification schemes to address these problems (Glasbergen 2007). These partnerships also aim to sustain the modern development agenda, which is seen as one of investments and business models (Van Tulder and Fortanier, 2009). According to a representative of the Dutch Ministry of Foreign Affairs, the agenda of development is to help maintain investment and capital flows to developing countries (Ronner-Grubacic, 2008). In this perspective, partnerships are seen as investment agreements.

At the World Summit on Sustainable Development (WSSD, 2002), this opportunity was recognised in the initiation of the so-called ‘Partnerships on Market Access’, which are based on the idea that agricultural trade is an important prerequisite for sustainable development and poverty alleviation. Collaboration between governments, businesses, and NGOs should improve the quality standards (for public health, food safety, social affairs, and the environment) of agricultural products and thus enhance markets for developing countries.

These partnerships reflect limits to the managerial capacities of governments, emerging in a context where states seem to have lost credibility – and with it their capacity to govern autonomously. They also reflect changes in the world of businesses, which feel a growing public pressure to adopt corporate social responsibility agendas and increasingly seek the engagement of stakeholders from civil society. They also reflect that professionalised NGOs change their strategies from mainly confrontational to more collaborative, working in partnerships with companies next to campaigning against them.

However, particularly the business-NGO nexus induces serious tensions (Glasbergen, 2011):

- First, businesses are motivated by the benefits of increased environmental performance (better public image, lower costs, less risk) to the extent that they are also able to maintain a competitive market position. NGOs seek to produce public goods that are intended as a general benefit for society as a whole: community trust, environmental protection and community health, increased
civic participation in decision-making, etc.

- Second, partners have different power bases. Businesses bring to a partnership economic assets and the potential to shape the practices of other businesses. NGOs offer environmental and social expertise, public trust, and the potential to use their membership base to shape the public image of companies. The power of the market sector derives from material forces and, indirectly, from the influence that can be levelled and the actions that can be achieved with money. The power of NGOs, on the other hand, stems from different factors, as NGOs have a power base built on collective group membership and a high degree of societal trust.

- Third, partners have responsibility to different constituencies. Market actors operate within business cycles and their constituency consists of the corporate owners, shareholders, and ultimately consumers. NGOs operate within issue cycles, a term which refers to the idea that civil society is temporally focused on specific ‘popular’ issues, or issues that have in some way become prevalent in the public consciousness. Their constituency is made up of organisation members and the general public opinion.

- Fourth, partners differ in their styles of cooperation. For companies, a business case is constituted through formal contractual arrangements, and a partnership can be seen as a contract as usual. NGOs often work in more open forms of cooperation, based on solidarity with a mission or on shared values. While businesses need to consider the effects of partnering on their future markets, NGOs need to make a strategic choice between a confrontational and campaigning strategy or a more consensual collaborative strategy to realise their ambitions (Van Huijstee and Glasbergen, 2010).

The civil society-market nexus may theoretically combine the economic and social realms, but the realities and complexities of the economic realm will easily dominate the area of overlap. Partners are always facing criticism for side-lining their core principles and, in the process, losing a degree of their legitimacy. This poses a considerable risk particularly for NGOs due to the fact that if they choose to adopt corporate conventions, they are also more susceptible to criticism of having been co-opted by the market. This becomes even trickier when the partnership creates financial benefits for the NGO, as it may easily be placed in the position of working for the corporation rather than working with it as a true partner, thereby potentially compromising the integrity of the alliance (Stafford and Hartman, 1996).

Moreover, not all NGOs, and perhaps also not all businesses, are able or willing to create collaborative advantages in partnerships. More recently, a specialisation in the field of NGOs has become visible. Some opt exclusively for collaborative approaches towards the market sector, while others take a confrontational approach and reject partnerships with business altogether (Åhlström and Sjöström, 2005). For example, the Round Table on Sustainable Palm Oil (RSPO), one of the cases in this research program, has been subject to numerous criticisms from campaigning NGOs that have not joined the initiative (Schouten and Glasbergen, 2011).

Much has been speculated about the broader consequences of the division of tasks in the world of NGOs. One of the main arguments refers to legitimacy risks, in the sense that partnering NGOs have the potential to lose legitimacy in the eyes of their more radical counterparts or the general public; or the other way around, that confrontational NGOs become marginalised and lose resources (Bendell and Ellersiek, 2009; Visseren-Hamakers and Glasbergen, 2007). In a study of two partnerships (sustainable palm oil and responsible soy), Hospes et al. (2009) concluded that the relations between businesses and NGOs in the case of soy have been a threat to the process, while similar relations in the case of palm oil pushed the process forward.

This project connects to research on how NGOs select strategies (e.g. Frooman & Murrell, 2005; Hendry, 2005) and influence company behavior (e.g., Esley & Lenox, 2006; Henriquez & Sharma, 2005; King, 2008; Zietsma & Winn, 2008). Other key areas of study have been why NGOs target certain companies, (e.g., Hendry, 2006; Rehbein, Waddock, & Graves, 2004) and what drives NGO mobilization (e.g., Rowley & Moldoveanu, 2003). However, the emergence of global certifying partnerships has created new dilemmas for NGOs and additional research questions. Up to now research in this area mainly focuses on Northern-
based (international) NGOs and neglects the role of Southern NGOs as mediators between smallholder farmers’ interests and global certifying partnerships. Moreover, hardly any research is available on the relationships between collaborating and campaigning NGOs in a developing context. By addressing these topics this research will deliver new insights on the roles of NGOs regarding sustainability certification.

b. Specific Objective(s)

This project aims to gain insights on how to improve the inclusion of local sustainability values and interests through Indonesian NGOs in global certifying partnerships. NGOs may fulfill these roles as a formal partner in certifying arrangements, guiding the certification process, or through campaigning against them. This project will study the whole field of Indonesian NGOs active on certification related roles on coffee and palm oil. The research covers both collaborating NGOs (involved in certification) and campaigning (opposing certification) NGOs, their interrelationships, and the effects of their strategies. If possible the researcher will include three other agricultural sectors, i.e., cocoa, spices and aquaculture, which are studied from a different perspective in other parts of the program.

The following research questions have been formulated:

- What are the characteristics of the NGO-landscape active in the field of sustainable coffee and palm oil production systems?
- What different intervention logics can be identified in this NGO-landscape on the sustainable improvement of production systems and how are they related?
- In what way and to what extent do NGO-strategies towards global certifying partnerships contribute to the inclusion of livelihood interests in the arrangements and to the empowerment of smallholders?

c. Workplan

As a first step, an inventory will be made of (environmental, social, and development) NGOs active in the field of coffee and palm oil. Here the formal methodology of Net-Map will be used. Net-Map is based on social network analysis and power mapping tools and allows analyzing and graphically representing multi-stakeholder relationships (Schiffer, 2007; Schiffer and Waale, 2008). The tool will provide an influence network map of the NGOs, as well as their relationships with the relevant environment. Their development will be studied by comparing Net-Maps in different time frames. Based on these graphical models of the evolution of NGOs’ relationships the further analysis will focus on the patterns of interaction amongst both the NGOs and related to the partnerships active in this fields. Interaction is understood as the deliberately applied set of activities of NGOs directed toward the improvement of the sustainability of agricultural production.

This analysis will be based on literature study, interviews with representatives of the main NGOs as well as relevant other stakeholders in the issue field.

As a second step, the project analyzes what roles the NGOs have developed overtime, why, and how these roles are fulfilled. This part will be based on a functional analysis (Mendizabal, 2006a, b). Hereby it is assumed that NGOs may perform roles related to amongst others:
- The identification and prioritization of problems and supporting research;
- The improvement of coordination and communication among stakeholders;
- The employment of activities contributing to the empowerment of smallholders and their institutions;
- The endorsement of fair and transparent trading procedures and policies that support sustainable production systems.

As a third step, concrete projects (collaborations and campaigns) of the NGOs will be connected to these roles, which will give a full overview of the activities. Based on that picture a further selection will be made of projects to be studied in more detail. The research on coffee and palm oil certification will probably take
place in the same regions as PhD 1 and PhD 2 of this JRP (for coffee: the Province of Lampung, Sumatra, and Toraja Highlands of South Sulawesi; for palm oil: the Province of Riau in Sumatra, and the Province of East Kalimantan in Borneo). The performance of the NGOs on improvement of the sustainable production of coffee and palm oil will be assessed by comparing them with the results produced by earlier government-based activities; confronting the results with a counterfactual situation (what would have happened without the NGOs); and/or some ideal state of activities. If feasible the researcher will include three other agricultural sectors, i.e., cocoa, spices and aquaculture.

Data will be found in dossier studies, analysis of produced reports and minutes of meetings and conferences as well by conducting semi-structured interviews with key informants.

The last step addresses the contribution of NGOs to sustainable production related collective action problems and the conditions under which they may improve the institutional system as described in the joint program (see also figure 1 in section 8)

Data for this part of the research project will be found through the study of documents, semi-structures interviews and participatory observation during the whole research project. At several moments the results of the research will be discussed in workshops and focus groups with NGOs.

d. Scientific Relevance

Global certifying partnerships create dilemmas for NGOs, as they need to decide on a collaborative strategy or a campaigning strategy. Current research shows a lot of uncertainty among NGOs on how to react. This is further complicated by the variety of certifying arrangements and the competition among them. Moreover, from various studies it has become clear that the effectiveness of private certification strongly depends on NGO support. This project will contribute to our knowledge on the changing roles of Indonesian NGOs in the face of the (global) partnership trend. While some research has been done on the role of NGOs from developed countries, there is hardly any research on the role of NGOs from developing countries, as well as the relationships/complementarities between the collaborative and campaigning NGO strategies and opportunities to improve their effectiveness.

5. Participation in a graduate School ('onderzoeksschool'):

The PhD students in this research program will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, http://www.icis.unimaas.info/education/must/), with the research base in the field of sustainable development at the International Centre for Integrated Assessment and Sustainable Development (ICIS), and linked to a wide (inter)national network. In MUST, PhD students and post-docs from different nationalities and disciplinary backgrounds work closely together under professional scientific leadership in interdisciplinary teams. MUST offers scientific training and a fruitful learning environment where the exchange of knowledge between younger and more experienced researchers is emphasised and developed. ICIS/MUST is a full member of the Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE, http://www.sense.nl/).

6. Scientific performance of members of the research group(s) (as defined under 2) (a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

- International (refereed) journals
  (include journal impact factors. Mandatory if your proposal is entered in the themes: Infectious diseases and Health or Food, Non-Food and Water Research. Optional for Social and Economic Development)


- National (refereed) journals


- Books or contributions to books

on theory and practice, Edward Elgar, pp. 138-170.

- **Other**

- Glasbergen, P., Participation on invitation in a ‘round table discussion’ on The future of UN-partnerships, UN, New York, 5 May 2009.
- Glasbergen, P., Understanding partnerships analytically, invited presentation, Workshop public-private partnerships for sustainability in Europe and beyond: New corporatism or new associationalism, Robert Schuman Centre for Advanced Studies, European University Institute, Florence, 3-4 June, 2008.
- Glasbergen, P., Setting the scene: Reflections on the partnership paradigm, keynote address, chair and coordinator, Colloquium Partnerships for Sustainable Development; The challenge of connecting private and public responsibilities, Royal Netherlands Academy of Arts and Sciences, Amsterdam, The Netherlands, June 2006.
- Glasbergen, P., Partnerships: The new management of natural resources, invited guest lecture, Management Development Institute, Gurgaon, India, 5 October, 2006.

7. Literature references (Max. 1 page)


Integration and Cooperation

8. Integration of research and scientific results in the JRP
(Max. 1000 words)

To study the interrelated development and governance problem of global certifying partnerships in agricultural commodity chains the joint research program (JRP) takes an institutional systems perspective. This entails a focus on the interrelations between the main actors in the field of research, their activities, and the effects of these activities, while it is assumed that in the short term characteristics of the agricultural production system may constrain any system changes. In this context, this research project contributes to research question 2 of the joint program, which aims to understand the social and economic effects of global certifying partnerships in the system of interactions between the main actors in sustainability certification. More specifically, the project develops knowledge that can be used to build a coherent Southern perspective for NGO policies related to global certifying partnerships. The figure below highlights the place of this project in the joint research program.
Management and Administration

9. Information on the managing capacities of the Project Leader(s)
(Max. 250 words)

Word count: 218

Prof. Glasbergen chairs the Utrecht-Nijmegen Programme on Partnerships; a collaboration of Utrecht University and Radboud University Nijmegen (www.unpop.nl). He was co-founder and member of the board of the Copernicus Institute for Sustainable Development and Innovation at Utrecht University 2000-2010. He was appointed as honorary professor at Maastricht University at 1-9-2011. Next to his ongoing teaching on Partnerships for Sustainable Development in the Utrecht master program Sustainable Development, he teaches a course on Governance for Sustainable Development in the Maastricht master program Sustainability Science and Policy. Since 2000 he successfully supervised 13 PhD students. Currently he supervises 4 PhD students who will finish their studies in 2012 (2 from South Africa) and 2013.

Prof. Santoso chairs the Department of Politics and Government, Faculty of Social and Political Science, Gadjah Mada University in Indonesia. He is Program Director of the Postgraduate Program on Political Science of the Faculty. He wrote a master thesis on the politics of sustainable development in Indonesia, and a PhD thesis on the politics of environmental policy-making in Indonesia (London School of Economics and Political Science). He has been engaged extensively in research and advocacy on the issues of public policy, democratic governance, the role of NGOs, and decentralization and local autonomy in Indonesia. His current research is on an institutional model for democracy in Indonesia.
Duration and Planning

10. Time table of the project and Milestones

In the first year the PhD student, together with the other PhDs in the program, will follow three classes at Maastricht University:
- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore the class will jointly work on a basic paper on:
- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the PhD student will work out its own research into an operational research plan in such a way that field work can start in the second year. The research plan must be approved by the supervisors at the end of the first year, and is a prerequisite to continue with the project.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the detailed research plans.

Approximate time schedule for the remaining duration of the program

The second year is dedicated to 8 months of field work in Indonesia. In between all PhD students in the program they will meet as a class at the University of Lampung to discuss progress and results. The last 3 months he/she will work on the first paper at Maastricht University. This paper analyzes the Indonesian NGO-landscape regarding coffee and palm oil certification in Indonesia.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to present and discuss the results.

The third year will follow the same pattern as the previous, with 8 months of field work in Indonesia. The PhD fellow will write two papers, one will be based on an analysis of NGO-roles and their performance, and the other will be a comparative analysis of NGOs in the institutional system of sustainability certification. The yearly multi-stakeholder workshop will take place at the University of Lampung or another Indonesian University. Furthermore it is the intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program of Dr. Hospes.

The fourth year the PhD thesis will be finished and defended at Maastricht University. It is the intention of the supervisors to also work out the conclusions on the level of the systems approach. The research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

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<tr>
<th>Year</th>
<th>Time table workplan</th>
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<td>Year 1</td>
<td>Courses at Maastricht University</td>
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<td>Joint research papers PhD students</td>
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<td>Operational research plan (must be accepted at end of year 1)</td>
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<td>Multi-stakeholder workshop Indonesia</td>
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<td>Year 2</td>
<td>Field work in Indonesia (and in the Netherlands)</td>
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<td>1st paper international journal</td>
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<td>Multi-stakeholder workshop Indonesia</td>
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11. Research location(s)

Maastricht University, Gadjah Mada University, University of Lampung.

Intensive consultation and in-depth discussion between the PhD student and the supervisors (as well as the advisors) will take place at Maastricht University in the Netherlands, and at Gadjah Mada University and at the University of Lampung (UNILA) in Indonesia. To ensure the quality of supervision and to maintain the progress, the supervisors will be involved in the process of field visits to the study sites and in the multi-stakeholder workshops in Indonesia.

Part II:

JRP Sub-Projects

Project-5 (21-SPIN-JRP-5)

1. Project title: Roles of governments related to (private) certification of global agricultural commodities

2. Research Group

a. Project Leader in the Netherlands
   Name / Title(s): Prof. Pieter Glasbergen
   University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

b. Project Leader in Indonesia
   Name / Title(s): Prof. Purwo Santoso
   University/ Institute: Department of Politics and Government, Faculty of Social and Political Science, Gadjah Mada University, Indonesia

c. Proposed Researcher: DIKTI PhD fellow
   If known:
   Name / Title(s):
   University/ Institute:
   Address:
   Tel.:
   Fax:

   To be decided
d. Other participants

Name / Title(s): Prof. Pieter Leroy (co-supervisor)
University/ Institute: Radboud University Nijmegen, Faculty of Management Sciences

Name / Title(s): Dr. Ary Darmastuti (advisor)
University/ Institute: Government Science Department, Faculty of Social and Political Sciences, University of Lampung, Indonesia.

Research Proposal

3. Summary of the Project Proposal (Max. 400 words)

The Indonesian export-driven part of the agricultural economy has become intensively involved in many global certifying partnerships that connect Southern production to Northern consumption. These partnerships aim to promote the sustainable production of agricultural commodities and are expected to simultaneously serve business and development interests. However, global certifying partnerships create dilemmas for governments as they need to find a new balance between private and public responsibilities. Current research shows a lot of uncertainty among governments on how to react. This is further complicated by the variety of certifying arrangements and the competition among them. Moreover, from various studies it has become clear that the effectiveness of private certification strongly depends on government policies.

This project aims to analyze the intervention logics of current policies (local, provincial, national) related to agricultural private certification on aspects such as coherence and policy integration, implementation capacity (from national to local), and acceptance of public policies. Furthermore it aims to define appropriate roles and effective strategies of governments regarding private certification given the need for a more sustainable production and improvement of the livelihood of (smallholder) producers. Therefore, the project will construct scenarios of possible government roles and strategies that will be confronted with the practices of government intervention. The project assumes that the roles and strategies in Southern countries (Indonesia) and Northern countries (The Netherlands) might be different though related, consequently comparative research will take place in both countries on five agricultural commodities (coffee, palm oil, cocoa, spices, and aquaculture). Research methods include: interviews with government officials, focus groups with farmer groups and government officials, multi-stakeholder workshops, scenario writing methodology, and document analysis. The project develops knowledge that can be used to build a coherent Southern perspective for government policies related to global certifying partnerships.

4. Detailed description of the Project (Max. 2000 words)

a. Scientific Background

In agricultural commodity chains connecting Southern producers with Northern consumers, global certifying partnerships between businesses and nongovernmental organizations (NGOs) have experienced considerable proliferation over recent years (Bitzer et al., 2008; Bitzer and Glasbergen, 2010). These partnerships have been defined as non-hierarchical, self-organizing, and coordinating multi-stakeholder arrangements to promote more sustainable production and consumption practices, while using the market as a coordinating mechanism to realize this objective (Glasbergen, 2007).

Their regulations comprise voluntary standards, codes of conduct, or certification schemes and they often organize monitoring of performance by accredited auditors. Though these private regulations lack the sanctioning power of formal governmental policies, they nevertheless tend to become sources of best practices. However, the potential consequences of partnerships are still widely debated among scientists.
- The evolution of such arrangements is often understood to be stimulated by the lack of regulatory capacity at governmental level. The rise of private actors developing their own regulations is then seen as a functional alternative to government policies (Pattberg, 2007).

- Another view is that having private governance in place may legitimize the retreat of the state or at least its unwillingness to tackle certain issues by governmental regulation (Graz and Nölke, 2008, p.21).

- Some authors raise the fundamental question whether public interests and values such as equity and justice can ever be compatible with private interests and values of free entrepreneurship, raising profits and rewarding shareholders. They particularly fear the risk of commodification of public interests (Saurin, 2001; Richter, 2002, 2003; Utting, 2000).

- Another line of review addresses the inability of private regulations to induce the necessary sustainable improvements. For example, they could lead to different levels of ‘good practice’, which open up the possibility for governments or companies to pick the regulations that suit them best, and avoid the most stringent regulations (Visseren-Hamakers and Glasbergen, 2007). According to Ensui (2002), private systems tend to appeal to the best producers or just good producers; seldom offering incentives for bad producers to be certified.

However, although many certifying private partnerships may be the result of ineffective government policies, they also rely strongly on them for their effectiveness. For example, private certification is unlikely to resolve the systemic sustainability problems of the coffee sector, such as price fluctuations, overproduction, and uneven power relationships, without government policies.

From the viewpoint of sustainable development, at least some government involvement seems to be necessary (Mol, 2007). Potential roles of governments can be formulated in terms of responsibilities that are crucial in the partnership process (Glasbergen, 2011):

- A first topic of responsibility regards the democratic credentials of partnerships. Turning private certifying partnerships into effective governance mechanisms implies that governments screen them on norms of good governance, such as representation, transparency, and accountability. The results should be made available for public and political debate. Regarding partnerships in which governments are a member, democratic norms should be a prerequisite to participate.

- A second topic is the complementarity of private and public governance. This implies that governments scrutinise private partnerships on their relationships to public objectives. If this is the case, governments can sustain them in several ways. For example, through their procurement policies in case of a private certification scheme; in some markets, public institutions are such big purchasers that they can set a trend for a more sustainable market. Governments may also sustain the most viable partnerships and/or help to create viable ones by stimulating alliances among the strongest ones if the issue connects to public objectives they are not able to implement themselves.

- A third topic, being the most important one, concerns developing a policy framework. As long as partnerships develop on an ad hoc basis, it cannot be expected that they are able to realise more than valuable but incremental changes in the process of sustainable development. Such a policy framework should be based on a more stringent thinking about the logical place of partnerships in government policies in a specific issue area, something that is currently almost totally lacking. This requires an analysis of regulation gaps that cannot be solved by governments, which may be an incentive to encourage private alternatives or public-private collaboration.

Concluding research question
Market trends show that the overall demand for certified sustainable agricultural products is still rising (KPMG, 2012). Also the business case for sustainability is becoming stronger, as companies are facing pressure to act on corporate social responsibility. NGOs from the North and the South are increasingly involved in these initiatives, while governments from the North and the South show a lot of confusion about their roles.
This change in global commodity chains will particularly influence the, from a development perspective, very important export driven part of the Indonesian agricultural economy. For suppliers in Indonesia the global standards are becoming de facto market requirements. A crucial question in this context regards the relationships between public responsibilities of governments and private responsibilities of certifying partnerships. This is a question that is not sufficiently addressed in current literature on partnerships (ISEAL, 2008; PBL, 2010).
b. Specific Objective(s)

This project aims to:

- Analyze the intervention logics of current policies (local, provincial, national) related to agricultural private certification on aspects such as coherence and policy integration, implementation capacity (from national to local), and acceptance of public policies.

- Define appropriate roles and effective strategies of governments regarding private certification given the need for a more sustainable production and improvement of the livelihood of (smallholder) producers.

These objectives will be set against the context of policy system changes in Indonesia; from a centralized to a decentralised/polycentric system.

The project assumes that the roles and strategies in Southern countries (Indonesia) and Northern countries (The Netherlands) will be different though related. Therefore comparative research will take place in both countries on five agricultural commodities (coffee, palm oil, cocoa, spices, and aquaculture). The research covers both the effects of governmental participation in the development of private certification schemes, and their reaction as a non-participant.

c. Workplan

The project first analyzes the intervention logics of current government policies regarding well-developed private certification schemes. Aspects of the analysis are the coherence and integration of policies of different government agencies at different scales, the implementation capacity of these policies, and the acceptance of these policies by the target groups. This research will take place on coffee and palm oil certification in the same regions as PhD 1 and PhD 2 of this JRP (for coffee: the Province of Lampung, Sumatra, and Toraja Highlands of South Sulawesi; for palm oil: the Province of Riau in Sumatra, and the Province of East Kalimantan in Borneo).

As a second step the research defines scenarios of possible roles and strategies of governments related to private certification. Tentative scenarios that do not necessarily exclude each other are:

- Governmental participation in the development of certifying partnerships, which brings up questions of equal footing given the specific public responsibilities of governments.

- Acceptance and stimulation of private regulation, but within governmental procedural prerequisites. This brings up questions related to securing norms of good governance, such as representation, transparency, and accountability.

- Developing complementarities between private and public regulation. This requires developing a policy framework that gives partnerships a logical place in government policies and necessitates the development of supporting and/or facilitating public policies.

- Rejection of private regulation, in which case governments develop their own public (competing) alternatives.

- Ignore private regulation.

As a third step the PhD confronts the scenarios with government practices on coffee and palm oil certification, and a broader set of certification schemes that are in the process of development (cocoa, spices, and aquaculture). These practices will be both analyzed on their influence on, amongst others, behavioral change of suppliers and improvement of production practices at the farm or producer level, as well as on unintended side effects, such as the competition in the market and the position of smallholders in global trade relationships.

The last step regards the application of the scenarios in an analysis of government policies in the Netherlands and a comparative assessment of Indonesian and Dutch governmental roles and strategies. Based on the research the PhD will define policy recommendations for governmental policy interventions.

Research methods include: interviews with government officials, focus groups with farmer groups and...
government officials, multi-stakeholder workshops, scenario writing methodology, document analysis.

d. Scientific Relevance

Global certifying partnerships for agricultural commodity chains create dilemmas for governments from the North and the South, as they need to find a new balance between private and public responsibilities. Current research shows a lot of uncertainty among governments on how to react. This is further complicated by the variety of certifying arrangements and the competition among them. Moreover, from various studies it has become clear that the effectiveness of private certification strongly depends on government policies. This project will contribute to our knowledge on the changing roles of governments in the face of the (global) partnership trend. While some research has been done on the role of governments from developed countries, there is hardly any research on the role of governments in developing countries, as well as the relationships/complementarities between the governments' roles in the North and the South.

5. Participation in a graduate School ('onderzoeksschool'):

The PhD students in this research program will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, http://www.icis.unimaas.info/education/must/), with the research base in the field of sustainable development at the International Centre for Integrated assessment and Sustainable development (ICIS), and linked to a wide (inter)national network. In MUST, PhD students and post-docs from different nationalities and disciplinary backgrounds work closely together under professional scientific leadership in interdisciplinary teams. MUST offers scientific training and a fruitful learning environment where the exchange of knowledge between younger and more experienced researchers is emphasised and developed. ICIS/MUST is a full member of the Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE, http://www.sense.nl/).

6. Scientific performance of members of the research group(s) (as defined under 2) (a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

- International (refereed) journals
  (include journal impact factors. Mandatory if your proposal is entered in the themes: Infectious diseases and Health or Food, Non-Food and Water Research. Optional for Social and Economic Development)


- National (refereed) journals


- Books or contributions to books

- Santoso, P., Susdinarjanti, T., (2007), The Map of Policy Conflict Embedded within Indonesia’s Political
- Other


7. Literature references (Max. 1 page)

- ISEAL (2008), Governmental use of voluntary standards; Innovation in sustainability governance, London.
- Richter, J. (2003), We the Peoples” or We the Corporations, Critical reflections on UN-business partnerships? Geneva: IBFAN-GIFA.
- Saurin, J. (2001), Global environmental crisis as the “disaster triumphant: The private capture of public goods, Environmental Politics, 10(4): 63-84.
To study the interrelated development and governance problem of global certifying partnerships the joint research program (JRP) takes an institutional systems perspective. This entails a focus on the interrelations between the main actors in the field of research, their activities, and the effects of these activities, while it is assumed that in the short term characteristics of the agricultural production system may constrain any system changes. In this context, this research project contributes to research question 2 of the joint program, which aims to understand the social and economic effects of global certifying partnerships in the system of interactions between the main actors in sustainability certification. More specifically, the project addresses research question 4 of the joint program: What are applicable roles and strategies of governments related to global certifying partnerships? The project contributes to our knowledge on the policy consistency of different levels of governments and the policy effectiveness related to the achievement of the objectives of sustainable agricultural systems, while focussing on the improvement of the livelihood of smallholder farmers. Furthermore, the project connects the North to the South in its comparative analysis of government policies related to global certifying partnership in Indonesia and the Netherlands. The project develops knowledge that can be used to build a coherent Southern perspective for governmental policies related to global certifying partnerships. The figure below highlights the place of this project in the joint research program.

*Figure 7 Roles of governments related to certification of global agricultural chains*
Management and Administration

9. Information on the managing capacities of the Project Leader(s)

Word count: 218

Prof. Glasbergen chairs the Utrecht-Nijmegen Programme on Partnerships; a collaboration of Utrecht University and Radboud University Nijmegen [www.unpop.nl]. He was co-founder and member of the board of the Copernicus Institute for Sustainable Development and Innovation at Utrecht University 2000-2010. He was appointed as honorary professor at Maastricht University at 1-9-2011.

Next to his ongoing teaching on Partnerships for Sustainable Development in the Utrecht master program Sustainable Development, he teaches a course on Governance for Sustainable Development in the Maastricht master program Sustainability Science and Policy.

Since 2000 he successfully supervised 13 PhD students. Currently he supervises 4 PhD students who will finish their studies in 2012 (2 from South Africa) and 2013.

Prof. Santoso chairs the Department of Politics and Government, Faculty of Social and Political Science, Gadjah Mada University in Indonesia. He is Program Director of the Postgraduate Program on Political Science of the Faculty. He wrote a master thesis on the politics of sustainable development in Indonesia, and a PhD thesis on the politics of environmental policy-making in Indonesia (London School of Economics and Political Science). He has been engaged extensively in research and advocacy on the issues of public policy, democratic governance, the role of NGOs, and decentralization and local autonomy in Indonesia. His current research is on an institutional model for democracy in Indonesia

Duration and Planning

10. Time table of the project and Milestones

In the first year the PhD student, together with the other PhDs in the program, will follow three classes at Maastricht University:

- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore the class will jointly work on a basic paper on:

- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the PhD student will work out its own research into an operational research plan in such a way that field work can start in the second year. The research plan must be approved by the supervisors at the end of the first year, and is a prerequisite to continue with the project.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the detailed research plans.

Approximate time schedule for the remaining duration of the program

The second year is dedicated to 8 months of field work in Indonesia. In between all PhD students in the program they will meet as a class at the University of Lampung to discuss progress and results. The last 3 months he/she will work on the first paper at Maastricht University. This paper analyzes government policies regarding coffee and palm oil certification in Indonesia.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to present and discuss the results.

The third year will follow the same pattern as the previous year with this difference that the PhD student
will also do field work in the Netherlands. He/she will write two papers, one will be based on an analysis of
cenarios for government roles and strategies regarding certification in Indonesia, and the other will be a
comparative scenario analysis of Indonesia and the Netherlands. The yearly multi-stakeholder workshop
will take place at the University of Lampung or another Indonesian University. Furthermore it is the
intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program
of Dr. Hospes.

The fourth year the PhD thesis will be finished and defended at Maastricht University. It is the intention of
the supervisors to also work out the conclusions on the level of the systems approach.
The research program will be concluded with an international conference in Indonesia, in which all PhD’s
and the postdoc participate.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Time table workplan</th>
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<tbody>
<tr>
<td></td>
<td>Courses at Maastricht University</td>
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<td></td>
<td>Joint research papers PhD students</td>
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<td></td>
<td>Operational research plan (must be accepted at end of year 1)</td>
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<tr>
<td></td>
<td>Multi-stakeholder workshop Indonesia</td>
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</tbody>
</table>

| Year 2 | Field work in Indonesia (and in the Netherlands) |
|        | 1st paper international journal |
|        | Master class Indonesia |
|        | Multi-stakeholder workshop Indonesia |

| Year 3 | Field work in Indonesia and in the Netherlands |
|        | Master class Indonesia |
|        | 2nd and 3rd paper international journal |
|        | Multi-stakeholder workshop Indonesia |
|        | Workshop in cooperation with Wageningen University |

| Year 4 | Finish and defend PhD thesis at Maastricht University |
|        | International conference in Indonesia |

11. Research location(s)

University of Lampung, Gadjah Mada University, and Maastricht University

Intensive consultation and in-depth discussion between the PhD student and the supervisors (as well as the
advisors) will take place at Maastricht University in the Netherlands, and at Gadjah Mada University and at
the University of Lampung (UNILA) in Indonesia. To ensure the quality of supervision and to maintain the
progress, the supervisors will be involved in the process of field visits to the study sites and in multi-
stakeholder workshops in Indonesia.
Part II:

JRP Sub-Projects

Project-6 (21-SPIN-JRP-6)

1. Project title: Joint knowledge production in global certifying partnerships

2. Research Group

a. Project Leader in the Netherlands
   Name / Title(s): Professor René Kemp
   University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

b. Project Leader in Indonesia
   Name / Title(s): Prof. Bustanul Arifin
   University/ Institute: Department of Agricultural Economics/Agribusiness, University of Lampung (UNILA), http://www.unila.ac.id

c. Proposed Researcher: SPIN Postdoc
   If known: To be decided
   Name / Title(s):
   University/ Institute:
   Address:
   Tel.:
   Fax:
   E-mail:
   O Male  O Female

d. Other participants
   Name / Title(s): Dr. Ron Cörvers (co-supervisor)
   University/ Institute: International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, http://www.icis.unimaas.info/

Research Proposal

3. Summary of the Project Proposal (Max. 400 words)  

In this (postdoc) project global certifying partnerships (GCPs) for agricultural commodity chains are analyzed from the perspective of joint knowledge production. Starting point for research is the underlying idea that the social and economic development of global agricultural commodity chains into sustainable agricultural systems (multi-dimensional challenge) and the co-operation of different societal actors in global partnerships (multi-stakeholder arrangement), require new types of knowledge and new ways of knowledge production. This project aims to better understand how in global certifying partnerships the relation between the demand and supply of knowledge is organized; in particular what types of knowledge are produced and used, in what ways, by whom, and for what purpose? The following research question is central to this project: what are the experiences with joint knowledge production in global certifying partnerships for agricultural commodity chains, and how can this process be improved?
The study will focus on the empirical manifestations of knowledge production in five agricultural commodity chains that are important for Indonesia, ranging from established global certifying partnerships for coffee and palm oil to new initiatives for developing global certifying partnerships for cacao, spices, and aquaculture. In particular, the study will analyze the perceptions of actors from different societal domains in the North and the South on the global partnerships under review (such as representatives from agribusiness and smallholder producers, NGOs, and governments). This comparative analysis will provide insights to design effective strategies for joint knowledge production in global certifying partnerships.

Joint knowledge production is inherently a process of co-operation, where changes in knowledge, attitudes and perceptions of actors are brought about by communication and interaction between different but interdependent actors. The project will apply a learning network approach, using web 2.0 social software (prototype: http://gcp4sas.net/elgg/), to enhance collaboration and social learning between actors from different societal domains that are involved in the global certifying partnerships under review, and study it.

The project is based on a combination of qualitative and quantitative methods that will be applied in several participatory multi-stakeholder workshops (as part of the PhD-projects) and through interviews with main stakeholders in the field of the global certifying partnerships under review and with experts in joint knowledge production.

The postdoc will also sustain the steering group in coordinating the fieldwork of the PhD projects.

4. Detailed description of the Project (Max. 2000 words)  

a. Scientific Background

Sustainable development issues are inherently complex and pose a major challenge to science, policy and society. The wicked or unstructured nature of sustainability and development problems ask for new types of knowledge and new ways of knowledge production (e.g. Funtowicz and Ravetz, 1993; Gibbons et al., 1994; Scholz and Marks, 2001; Kemp and Martens, 2007; Lang et al., 2012). In the literature it is typically argued that in the production and utilisation of knowledge scientists, policy makers and other societal stakeholders should co-operate to guarantee an optimal relation between the demand and supply of knowledge (Cash et al., 2003; Van Kerkhoff and Lebel, 2006). Co-operation in the production of knowledge between actors from different societal domains takes place at the 'science-policy interface', and involves “social processes which encompass relations between scientists and other actors in the policy process, and which allow for exchanges, co-evolution, and joint construction of knowledge with the aim of enriching decision-making” (Van den Hove, 2007).

Joint knowledge production is inherently a process of co-operation, where changes in knowledge, attitudes and perceptions of actors are brought about by communication and interaction between different but interdependent actors. The issue of how actors from different societal domains can effectively contribute to joint knowledge production, has been identified as a major gap in our existing knowledge on governance and policymaking in pursuit of sustainable development.
Processes of knowledge production and utilization are influenced by the institutional context in which they are set (see Figure 1). Optimal connections in demand and supply of knowledge between the different domains of science, policy and society are difficult to realize due to inherent differences, such as different goals, process cycles, quality controls, epistemologies, languages and time frames (Van den Hove 2007; Hegger et al., 2012). In the literature on the science-policy interface several schools of thought can be distinguished. Some authors regard science and policy as separate communities, characterized by divergent logics, others claim that the two communities are more or less intertwined, characterized by converging logics (Hoppe, 2005). Recent integrative models of the science-policy interface typify various forms of knowledge exchange in a common framework (see Hoppe, 2005; Kerkhoff and Lebel, 2006), such as translation of knowledge from one community to the other(s) by various types of knowledge brokers (Pielke, 2007; Jasanoff, 1990), exchanging knowledge in participatory platforms, and by forms of knowledge co-production (e.g. Hessels and Van Lente, 2008; Gibbons et al. 1994; Kemp and Rotmans, 2010; Scholz et al., 2006).

Due to different schools of thought a dynamic and flexible notion is needed to study the science-policy interface and processes of joint knowledge production in practice. The notion of ‘boundary work’ has proven its value in the analysis of the social practice of demarcation between science and policy, and practices of meaningful interaction between these two domains (Gieryn, 1983; Hoppe, 2005). The concept assumes that the boundary between science and policy are not fixed, but continuously discursively determined and negotiated by the actors in, and in between, both domains. It is also, suggested that the interface between science and policy may be bridged by ‘boundary workers’, i.e. scientists performing ad hoc in policy settings (or policy makers in academic settings), or forms of institutionalized ‘boundary organizations’ (e.g. Cash et al. 2003; Guston, 2001).

A tentative hypothesis for this project is that in agricultural commodity chains concepts such as “fair-trade” and “sustainable product” function as ‘boundary object’ for actors from different societal domains in global certifying partnerships, but that their beliefs, perceptions, interests and objectives will be quite different.

In the past decades we have also seen a shift from government to governance. The global certifying partnerships studied in this project and research program are a specific mode of governance in practice. A consequence of the shift from government to governance for the science-policy interface is a shift from technocracy to a ‘democracy of knowledge’, in which the knowledge and interests of all stakeholders counts, including local and experiential ‘lay’ knowledge. Thanks to ICT development, the opportunities for science-policy interaction on ideas, data, hypothesis and solutions is proceeding at an accelerated pace (e.g. virtual communities, e-journals), and tools and methods for science-policy interaction are multiplying (e.g. participatory modeling, online databases). So, what constraints and opportunities are there in practice for joint knowledge production in global certifying partnerships? Furthermore, Cash et al. (2003) have found that production and mobilization of knowledge across boundaries of science and action will likely be effective when criteria of salience, credibility and legitimacy can be met simultaneously for all actors involved. In what way and to what extent can processes of joint knowledge production in global certifying partnerships...
partnerships for agricultural commodity chains comply with this requirement?

The following research question is central to this project:

- What are the experiences with joint knowledge production in global certifying partnerships for agricultural commodity chains, and how can this process be improved?

**b. Specific Objective(s)**

Starting point of this project is the underlying idea that the social and economic development of global agricultural commodity chains into sustainable agricultural systems (multi-dimensional challenge) and the co-operation of different societal actors in global partnerships (multi-stakeholder arrangement), require new types of knowledge and new ways of knowledge production. This project aims to better understand how in global certifying partnerships the relation between the demand and supply of knowledge is organized; in particular what types of knowledge are produced and used, in what ways, by whom, and for what purpose?

The specific objectives of this research are:

- To analyze experiences and practices of joint knowledge production in the 5 global certifying partnerships for agricultural commodity chains under review (coffee, palm oil, cacao, spices, aquaculture)
- To provide knowledge to design effective strategies for joint knowledge production in global certifying partnerships.

**c. Workplan**

This project (postdoc, 4 year half-time) applies a combination of qualitative and quantitative methods. First, the project will develop a conceptual framework to analyze processes of joint knowledge production in global certifying partnerships for agricultural commodity chains, and formulate hypotheses about how co-produced knowledge ideally should be developed (literature review, expert meeting and/or semi structured interviews, survey).

Second, analysis of (well-established) global certifying partnerships for coffee and palm oil. Intensive collaboration with research activities of the PhD projects on coffee and palm oil to share knowledge, data, contacts, etc. The analysis will help to assess the relevance of the conceptual framework, and enables an evaluation of joint knowledge production in practice. This is also a first test of the hypothesis.

Third, based on the information of the first two steps, the project will analyze new initiatives for the development of global certifying partnerships in the field of cacao, spices, and aquaculture. Intensive collaboration with research activities of the PhD projects on Institutional Economics, NGOs, and Government to share knowledge, data, contacts, etc. The crosscutting topics of these PhD projects are expected to provide useful insights from actors/stakeholders from different societal domains to design effective strategies for joint knowledge production in global certifying partnerships. Furthermore, it enables a further test of the hypothesis.

Finally, synthesis of joint knowledge production in global certifying partnerships for agricultural commodity chains. Answering the research question will be of main concern here.

The project is based on a combination of qualitative and quantitative methods. Qualitative research methods (network analysis, stakeholder analysis, frame-analysis) will be applied in participatory multi-stakeholder workshops (part of the PhD-projects) and through interviews with main actors/stakeholders in the field of the global certifying partnerships under review. Quantitative research (applying Q methodology) is envisioned through an online questionnaire for a large number of actors in the field of global certifying partnerships and experts in the field of joint knowledge production, where respondents will be asked to rank-order statements according to how much they agree/disagree with each statement. With the help of Q methodology, the perceptions and beliefs of actors can be aggregated into meaningful social groups (e.g., those that are concerned about global environmental change and those that emphasize livelihood
conditions of smallholder producers at local level). Such knowledge is useful to design effective strategies for joint knowledge production in global certifying partnerships.

An important part of the research will be conducted through a technology enhanced learning network approach. For this reason a dedicated website (using web 2.0 social software for virtual community building) will be developed to enhance knowledge exchange and social learning between different actors and stakeholders involved in global certifying partnerships. Prototype: [http://gcp4sas.net/elgg/](http://gcp4sas.net/elgg/)

The postdoc project will also sustain the steering group in coordinating the fieldwork of the PhD projects.

d. Scientific Relevance

- This project will provide insight into the demand and supply side of knowledge production in global certifying partnerships for agricultural commodity chains, in particularly what types of knowledge are produced and used, in what ways, by whom, and for what purpose.

- This project will contribute to the improvement of our knowledge about the design of effective strategies for joint knowledge production in global certifying partnerships.

- This project will enhance knowledge exchange and social learning between different stakeholders in global certifying partnerships.

5. Participation in a graduate School ('onderzoeksschool'):

The PhD students in this research programme will be embedded in the Maastricht University Graduate School of Sustainability Science (MUST, [http://www.icis.unimaas.info/education/must/](http://www.icis.unimaas.info/education/must/)), with the research base in the field of sustainable development at the International Centre for Integrated assessment and Sustainable development (ICIS), and linked to a wide (inter)national network. In MUST, PhD students and post-docs from different nationalities and disciplinary backgrounds work closely together under professional scientific leadership in interdisciplinary teams. MUST offers scientific training and a fruitful learning environment where the exchange of knowledge between younger and more experienced researchers is emphasised and developed. ICIS/MUST is a full member of the Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE, [http://www.sense.nl/](http://www.sense.nl/)).

6. Scientific performance of members of the research group(s) (as defined under 2) (a limit of 25 publications applies for each research group member referred to. Only list those publications most pertinent to this application.

   • International (refereed) journals


- National (refereed) journals

- Books or contributions to books


7. Literature references (Max. 1 page)

- Hoppe, R. (2005), Rethinking the science-policy nexus: from knowledge utilization and science technology studies to types of boundary arrangements. Poiesis & Praxis: International Journal of Technology Assessment
Integration and Cooperation

8. Integration of research and scientific results in the JRP
(Max. 1000 words)

This project focuses on a crucial dimension of the overall institutional system approach of the Joint Research Program (JRP) by analyzing processes of joint knowledge production in global certifying partnerships. These partnerships aim for sustainable change in agricultural commodity chains and simultaneously seek to serve business and to do justice to development interests. Knowledge production and knowledge exchange play a pivotal role in this respect, but also actors’ views on sustainable agricultural systems in general, and the improvement of livelihood conditions of (smallholder) producers in particular.

This project contributes to the program with a literature study on developments in the field of research on global certifying partnerships.

This project will identify constraints and opportunities for joint knowledge production in global certifying partnerships for agricultural commodity chains. In addition, this project contributes to our knowledge about actors’ beliefs, perceptions, interests and objectives in global certifying partnerships. Actors from different societal domains and from the North and the South (see the highlight in Figure 2 below).

This project will set a basis for defining effective strategies for joint knowledge production in global certifying partnerships. The potential effects of improving the impact of co-produced knowledge are considerable. For example, co-produced knowledge may be more policy relevant than knowledge produced by science alone, co-produced knowledge translated into policy may gain more social support (if actors have had a say in the issue), and co-produced knowledge may be more context-specific (if ‘lay’ knowledge is taken into account), and therefore more useful for end-users.

Finally, this project will foster a dialogue and cooperation between the PhD-projects in this Joint Research Program (JRP) and promotes the exchange of knowledge, data and contacts. Furthermore, the postdoc will sustain the steering group in coordinating the fieldwork of the PhDs.

Figure 2 Joint knowledge production in global certifying partnerships
Management and Administration

9. Information on the managing capacities of the Project Leader(s)
(Max. 250 words)
Word count: 231

René Kemp is a professor of Innovation and Sustainable Development at ICIS at Maastricht University and professorial fellow of UNU-MERIT in Maastricht. René Kemp has a broad range of expertise, covering various sectors (manufacturing, transport, energy, waste) – involving multiple methods of analysis. He views the world from an evolutionary institutionalist perspective and is one of the most cited innovation researchers (h-index of 26). He is advisory editor of Research Policy (the world-leading innovation journal), editor of Sustainability Science and editor of the new journal Environmental Innovation and Societal Transitions.

Prof. Bustanul Arifin is professor of agricultural economics in the University of Lampung, Indonesia. He is also professorial fellow in the International Center for Applied Finance and Economics of Bogor Agricultural University (InterCAFE-IPB). His research interests include agricultural policy, food security, institutional economics and sustainable development strategies. Professor Arifin is currently serving as a Chairman of Expert Group of the National Food Security Council and a member of National Innovation Council, both under the President of Republic of Indonesia.

Dr. Ron Cörvers is associate professor in governance and sustainable development, and education director at ICIS, Maastricht University. He is chair of the MUST PhD program. He managed EU projects on (e)learning and sustainable development. He teaches in environmental policy, governance and sustainable development. His research interests are in the field of governance and sustainable development, and technology enhanced learning for sustainable development.
Duration and Planning

10. Time table of the project and Milestones

Joint class with PhDs
In the first year the postdoc, together with the PhDs in this JRP, will follow classes at Maastricht University (also depending on previous knowledge):
- Research on partnerships in global governance and development.
- Methods and tools for sustainability assessment.
- Academic skills (reading, writing, presenting, project management, etc.)

Furthermore, the class will jointly work on a basic paper on:
- The intervention logics of the certifying partnerships of relevance in the program.
- The characteristics of global agricultural commodity chains central to this program.
- The agricultural systems under review in relation to society and environment.

Individually the postdoc will finish a literature review on global certifying partnerships for agricultural commodity chains, and develops a theoretical/conceptual framework to analyze processes of joint knowledge production in global certifying partnerships.
Deliverable: Working Paper (First paper) on theoretical/conceptual framework for joint knowledge production in global certifying partnerships.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to discuss the literature review and theoretical/conceptual framework.

Approximate time schedule for the remaining duration of the program
In the second year the theoretical/conceptual framework for joint knowledge production will be applied in the field of global certifying partnerships for coffee and palm oil. The postdoc co-operates intensively with the PhDs working on coffee and palm oil to exchange knowledge, data and contacts. Methods to be used are participatory multi-stakeholder workshops, semi-structured interviews, and online questionnaire.
Deliverable: International publication (Second paper) on theoretical/conceptual framework and empirical analysis coffee and palm oil.

In between all PhD students in the program and the postdoc will meet as a class at the University of Lampung to discuss progress and results.

The year will be concluded with a multi-stakeholder workshop at the University of Lampung to present and discuss the results.

The third year will follow the same pattern as the previous.
Application of theoretical/conceptual framework for joint knowledge production on emerging initiatives for the development of global certifying partnerships in the field of cacao, spices, and aquaculture. The postdoc co-operates intensively with the PhDs working on institutional economics, NGOs, and government to exchange knowledge, data and contacts. Methods to be used are participatory multi-stakeholder workshops, semi-structured interviews, and online questionnaire.
Deliverable: Working paper (third paper) on theoretical/conceptual framework and empirical analysis cacao, spices, aquaculture, and especially the beliefs, perceptions, interests and objectives of different actors in global certifying partnerships. Actors from different societal domains and from the North and the South.

The yearly multi-stakeholder workshop will take place at the University of Lampung or another Indonesia University. Furthermore it is the intention to organize a workshop in the Netherlands in cooperation with the Wageningen research program of Dr. Hospes.

The fourth year the postdoc will finish the study and publish a final paper. Answering the research question will be of main concern here.
Deliverable: International publication (Fourth paper): synthesis of joint knowledge production in global...
certifying partnerships for agricultural commodity chains.

The joint research program will be concluded with an international conference in Indonesia, in which all PhD’s and the postdoc participate.

See the timetable below for an overview of the planning and milestones.

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<th>Time table workplan</th>
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<tr>
<td><strong>Year 1</strong></td>
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<tr>
<td>Courses at Maastricht University (depending on previous knowledge)</td>
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<tr>
<td>Joint research papers with PhD students</td>
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<tr>
<td>Literature review global certifying partnerships, and theoretical/conceptual framework: working paper (first paper)</td>
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<tr>
<td>Multi-stakeholder workshop Indonesia</td>
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<tr>
<td><strong>Year 2</strong></td>
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<tr>
<td>Application theoretical/conceptual framework, study coffee and palm oil (intensive cooperation with PhDs)</td>
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<tr>
<td>Paper international journal (second paper)</td>
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<tr>
<td>Master class Indonesia</td>
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<tr>
<td>Multi-stakeholder workshop Indonesia</td>
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<tr>
<td><strong>Year 3</strong></td>
</tr>
<tr>
<td>Application theoretical/conceptual framework, study cacao, spices, aquaculture (intensive cooperation with PhDs)</td>
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<tr>
<td>Master class Indonesia</td>
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<tr>
<td>Working paper (third paper)</td>
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<tr>
<td>Multi-stakeholder workshop Indonesia</td>
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<td>Workshop in cooperation with Wageningen University</td>
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<td><strong>Year 4</strong></td>
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<tr>
<td>Paper international journal: synthesis study (fourth paper)</td>
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<tr>
<td>International conference in Indonesia</td>
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</table>

11. Research location(s)

The postdoc project will be embedded in Maastricht University (ICIS-MUST) and operates in close cooperation with the project leaders and the PhD students in this research program. Desktop research for this project can take place at Maastricht University, while participation and observation in the participatory multi-stakeholder workshops will take place in Indonesia (or another designated place). Interviews with main actors and other stakeholders in the field of the global certifying partnerships under review and experts in the field on joint knowledge production, will take place on location and/or through ICT. The learning network approach, using web 2.0 technology is an important research dimension for this project.