

## HORTIN II Co Innovation Programme

***Towards cost effective, high quality value chains***

**Co innovation in supply chains**

**Mission Report 10**

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The Hague, Lembang, February 2008



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The purpose of the HORTIN II programme is to contribute to the development of cost effective high quality value chains for the selected commodities hot pepper, shallot and sweet pepper. Among others this can be achieved when technology development takes place in close collaboration between public institutions, farmers and private companies.

In Indonesia, the programme is carried out by the Indonesian Vegetable Research Institute (**IVEGRI**) in Lembang. In the Netherlands Applied Plant Research (**APR**), WUR-Greenhouse Horticulture (**GH**) and Agricultural Economics Research Institute (**AEI**), all part of Wageningen University and Researchcentre, are the principal partners.

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## Executive summary

In February 2008 a team of LEI, IVEGRI and Fresh Studio staff conducted a mission to initiate the supply chain research and development activities in the HORTIN program. The mission used the results of a previous mission which formulated the basic framework for a co-innovation programme and proposed a thematic and commodity priority setting.

For sweet pepper and hot pepper two producers groups and two supermarket chains were identified for participation in the pilot supply chains. Jointly with these partners a list of topics for inclusion in the action research of the pilot supply chains were identified.

The mission has recruited and appointed an Indonesian supply chain facilitator, formulated a terms of reference and arranged an organisational setting for the supply chain facilitating process.

The mission formulated a plan of activities for the period March – August 2008 for the supply chain facilitation and supply chain research and development program.



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# 1 Introduction

## 1.1 Terms of Reference

### *Background*

In the report of the mission on co-innovation, implemented October 28 – November 7, 2007 by a combined Indonesian-Dutch team, the basic framework for a co-innovation programme was sketched and a thematic and commodity wise priority setting proposed. The project management team has decided that two pilots will be implemented in 2008: one in sweet pepper and one in hot pepper. It was concluded that a local supply chain facilitator needs to be appointed to facilitate these pilots. Based upon the results and recommendations of the previous mission, it was agreed that a follow-up mission will prepare and initiate the two pilots in February 2008.

### *Purpose*

The objectives of the joint mission are:

- Identify private partners (retailers, traders, producers and service and input providers) for active participation in pilot supply chains in sweet pepper and hot pepper;
- Jointly with chain actors identify specific topic(s) to address in the pilot chains;
- Jointly with chain actors and based upon the identified topic(s) formulate a detailed work plan including definition of roles and tasks of various partners and detailed budget for the two pilot supply chains for 2008;
- Obtain commitment of partners on the implementation of pilots;
- Formulation of a job description for an Indonesian supply chain facilitator for facilitation of the two pilot supply chains;
- Interview candidates for the position of supply chain facilitator;
- Explore options for public and private co-funding of up-scaling of pilots projects;
- Discuss the concept of co-innovation within supply chains and the involvement of Directorate General Horticultural Production with the MoA in Jakarta;
- Exploratory discussions on framework for monitoring & evaluation;
- Debriefing results of the mission to the Agricultural Attaché
- Reporting on the mission

The mission was jointly implemented by LEI and IVEGRI and included the following members:

LEI: André de Jager and Marcel Stallen (external consultant Fresh Studio)

IVEGRI: Witono Adiyoga.

The mission was implemented in the period February 10 – 16, 2008. The program of activities is presented in Annex 1.

## 1.2 Methodology

Based upon the contacts established and discussions held during the previous mission, a program was developed by the Fresh Studio consultant aiming at arriving at agreements with actors in the hot pepper and sweet pepper supply chain. Interviews were implemented with potential partners in the pilot supply chains focusing on identifying topics for action research for inclusion in the pilot and obtaining commitments for actual participation in the pilots.

Much attention was paid by the mission to the realisation and institutional setting of a local supply chain facilitator. As a result of a vacancy announcement distributed within the HORTIN network in Indonesia, candidates which applied for the position of supply chain facilitator were interviewed by the mission team. Discussions with the Indonesian-Netherlands Association (INA) were implemented concerning contractual and payroll agreements and logistical arrangements for the supply chain facilitator.

The mission discussed with various relevant organisations the options for additional funding of activities and establishment of linkages with other relevant programs and projects.

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### 1.3 This mission report

In chapter 2 the two pilot supply chains and their actors are described in detail. A grosslist of potential topics for action research is included, but needs further discussion and formulation in the coming period. Chapter 3 describes the organisational setting of the activities in the HORTIN program and relations to other relevant programs. A detailed planning of activities for the period March – August 2008 is presented in chapter 4. In chapter 5 a brief description is given on potential additional activities which could be linked to the HORTIN program. Chapter 6 describes results of discussions with Directorate General of Horticulture, World bank and the Dutch Agricultural Counsellor at the Royal Embassy.

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## 2 Pilot Supply Chains

### 2.1 Co-innovation approach

The co-innovation approach as described in the previous mission report will be applied in two pilot supply chains:

- Sweet pepper – Supermarket/Export Supply Chain
- Hot Pepper – Supermarket Supply Chain

These pilots focus on high quality market segments only. The relative simplicity of these supply chain is the main reason for inclusion in the pilot activities. Indeed it is realised that the majority of the horticultural products are traded through different and more complicated channels and it is the aim of the project to address these other channels in a later phase, once the team has gained more experience in conducting action research within supply chains with commercial partners.

The major steps in the approach are:

- Identification and establishment of pilot supply chains
- Conducting action research within the pilot supply chain on new chain configuration arrangements and novel product and marketing concepts (see also description in previous mission report)
- Observation, analysis and learning
- Capacity building of chain actors, supply chain facilitator and research staff
- Up-scaling and recommendations

During this mission the team focused on the identification of partners in two pilot supply chains, obtain commitments for participation and further explore potential topics for the action research. The further details of the set-up and organisation of the pilot supply chain will be done by the supply chain facilitator with guidance of Fresh Studio. The HORTIN research team consisting of IVEGRI and LEI will get involved during the formulation and inclusion of the topics for action research. A plan for research activities will be developed and fine tuned in collaboration with partners in the coming months inc.

Research activities will focus on:

- Socio-economic analysis
- Monitoring of the process and impact assessment (base line, performance indicators etc.)
- Institutional analysis

The missions observes that as soon as the pilot supply chains are up and running, more intensive integration between the agronomic and supply chain research component of HORTIN II are required. For instance a farmers-led monitoring of technical-economic performance of experiments (currently lacking) can be linked to a monitoring and evaluation program of supply chain performance.

### 2.2 Retailers in pilot supply chains <sup>1</sup>

#### **Ranch Market – Farmers' Market (Mrs. Cara Laksono)**

Summary of discussions:

- Ranch Market and Food / Farmers Market have separate supply lines. HORTIN will focus project its activities on Ranch Market. Ranch Market has 7 outlets in Jakarta and is in the process of opening at least two more outlets in 2008. Ranch Market is continually looking for new products, new market concepts to service their clients better. Opportunities for organic produce, flow packed sweet pepper, a hot pepper variety name 'monteri' and others were discussed.

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<sup>1</sup> HERO supermarkets requested more time to decide about possible participation and wanted to discuss our request within their organization first. HERO staff will be contacted at a later stage.

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**Action:** HORTIN supply chain facilitator will initiate discussions with staff on new products and - concepts in collaboration with suppliers / producers in pilot project.

- Opportunities for inclusion of other products than sweet pepper and hot pepper products will be explored at a later stage.
- The HORTIN project consortium can offer various services such as training of producers / fresh retail staff, assistance in branding strategies, PR and communication, packaging support etc. This will be decided depending on the specific situation of Ranch Market and products market combinations (PMC's) at a later stage.
- Ranch Market is requested for their cooperation to analyze supply chains, document and communicate experiences and assess opportunities for up scaling the pilots to other products and other regions. Ranch Market is in the drivers' seat as far as commercial transactions, quantities and quality are concerned.

**Action:** Planned activity and results will be discussed with Ranch Market staff. Ranch Market has its own magazine which could be used for communication about our joint project.

**Action:** Supply Chain facilitator will plan a meeting with producers and Ranch Market fresh procurement staff to match supply and demand.

- The Director in Surabaya will be informed about the tentative agreements. It is suggested for the HORTIN team to discuss with the Director about our experiences and support activities with Fresh Distribution Centres elsewhere in Asia.
- Ranch Market expressed willingness to participate in EU proposal on supply chain development. After pre-qualification a full fledged proposal will be prepared and discussed with Ranch Market staff.

#### ***MataHari Supermarkets (Mr Budiharjo and Mr. Ong Thian Yoe)***

Summary of discussions:

- HORTIN project will focus on sweet pepper and hot pepper initially, a group of trained producers will participate but they are not yet GlobalGAP certified.

**Action:** Supply chain facilitator will introduce himself and the producers' groups plus products to Mata Hari staff as soon as this is appropriate and discuss better matching of supply and demand of fresh produce. As a standard procedure MataHari will visit the facilities and production sites of producers.

- A unique selling point of the Cisarua producers' groups could be integrated production methods including biological control measures.
- One of the important issues for MataHari is the communication strategy on fresh quality and safety issues to their consumers. Food safety will be a crucial issue in the years to come. MataHari stores will be ISO 22000 certified from 2008 onwards and this will have implications for their fresh produce suppliers.
- In return for HORTIN support to MataHari is requested to cooperate in the analysis of the supply chains and documentation and communication of experiences, as well as assessing opportunities for up scaling pilots to other products and other regions. MataHari is in the drivers' seat as far as commercial transactions, quantities and quality are concerned.

**Action:** Planned activities and results will be discussed with MataHari staff.

- MataHari has in the past years encountered problems with the commitment (i.e quality, continuity and quantities) of smallholders and possibilities for GlobalGap certification.

**Action:** it is likely that sweet and hot pepper producers in the HORTIN pilot need to be trained and supported on GlobalGAP certification in order to supply to MataHari.

- For fruit MataHari has two fresh Distribution centres at strategic locations in Indonesia. All quality control, packaging and distribution is organized through these centres. For vegetables MataHari still relies on direct delivery to their stores, but is planning towards delivery through a fresh DC soon in Cibuenyi (60 km from Jakarta)
- All MataHari Capsicum products are currently supplied by the DC of Amazing Farms (hydroponics and organic produce mainly).

- There has been a steady trend towards large scale producers because of economies of scale and easy procurement procedures. In future political pressure to source more products from cooperatives and smallholders in Indonesia may arise.
- MataHari expressed willingness to participate in EU proposal on supply chain development. After pre-qualification a full fledged proposal will be prepared and discussed with MataHari staff.
- MataHari cooperates with the Thai Ministry of Agriculture and traders and the import fresh fruits.

## 2.3 Producers in pilot supply chains

### *Sweet Pepper Producers' Association, Cisarua*

Summary of our discussions:

- Potential supply traded through the coop is currently 5 tons per week. However it is estimated that only 20% of the total supply of the members is exported through the cooperative.  
**Action:** The HORTIN program could provide support on strengthening internal organization of the cooperative (e.g. commitment of members, revision of procedures, quality control, contracts, prices etc).
- Cooperative members don't keep records on inputs, crop performance and other key performance indicators. For any type of future certification programs this is mandatory, but also for the evaluation of the HORTIN program itself.  
**Action:** Support from HORTIN team in introducing systematic record keeping and benchmarking of enterprises, discussing and comparing crop results and input costs etc. (IVEGRI/WUR research team).
- Fluctuating prices at export and domestic markets often lead to opportunistic behavior of cooperative members. Non-compliance of the cooperative with contracts is a serious issue / risk. It is not fully understood by all members that large exporters / importers or buyers want long term contracts with fixed prices. On the other hand behavior is understandable.  
**Action:** cooperative members need to get more insight in the long-term economic performance and the development of effective strategies for compliance with contracts. In general entrepreneurship of the individual farmers and the cooperative need be strengthened and professionalized.
- Apart from packing sweet peppers in industrial (30 kg plastic bags), the cooperative does not add any value after harvest. The coop does not provide washing, grading or packaging or transport facilities for their members.  
**Action:** Supply chain facilitator and cooperative management will explore opportunities to cater exclusively for new markets with retailers participating in the project. Availability and accessibility of credit facilities to enable the realization of investment in facilities for value adding (wrapping machine ...?) will be explored by the project.
- The management of the cooperative is interested to explore new markets such as pizza, cut salads etc.  
**Action:** Supply chain facilitator and cooperative management will explore opportunities of new markets
- Production planning and market information tools need to be deployed to arrive at better matching of supply and demand.

### *Hot Pepper Producers' group, Subang or Purwakerto*

Summary of our discussions with Rien Rodenburg (EWINDO):

- EWINDO is in the process of releasing one or more promising hot pepper varieties. These varieties are tested under experimental and under farmers' conditions. EWINDO is interested to participate in the supply chain trials to further test the performance of new varieties and to fast track the introduction of their varieties. Currently EWINDO invites buyers of major supermarkets to their field days and experimental sites.  
**Action:** HORTIN supply chain facilitator will introduce himself to EWINDO staff and familiarize himself with opportunities for supply chain development connecting farmers with retailers using Cap Merah varieties and will function as an interface in between producers and markets.

- To utilize the full potential of the new EWINDO hybrid hot pepper varieties (Cap Merah) at medium elevation, land net houses are needed to keep the greenhouse free of insects. In a pilot with growers it should be demonstrated that a higher price for a better quality in combination with higher production compensates for the extra input costs and investments.

**Action:** HORTIN supply chain facilitator will explore options for credit facilities necessary for investments in greenhouses.

## 2.4 Sweet pepper pilot supply chain

A quick supply chain analysis was executed in November last year and is reported in HORTIN mission report number 9. It was concluded that continuity of supply is the major bottleneck for supply chain development in the sweet pepper sector in Java. The challenges are to increase the production level in the dry season and to improve the commitment of the growers for the export market. Increased production in the dry season may require better greenhouse technology or heat resistant varieties. More commitment of the growers may require institutional knowledge on cooperative management or other payment systems.

During this mission the following partners committed themselves to participate in sw. pepper pilot supply chains:

- Cisarua Farmers Cooperative
- Ranch Market Supermarket
- MataHari Supermarket

A first inventory on topics for experimentation in the pilot chain were explored with these partners. The results are summarised in the following table:

**Summary of partners and topics in sweet pepper pilot supply chain**

Producers	Service providers	Trade and logistics	Fresh Distribution Centre	Retail market
Cisarua Farmers Cooperative	<ul style="list-style-type: none"> <li>• HORTIN supply chain facilitator</li> <li>• IVEGRI / WUR technical expertise and training</li> <li>• ENZA &amp; RijkZwaan Seeds ?</li> <li>• Credit scheme ?</li> <li>• Others yet to be identified</li> </ul> <ul style="list-style-type: none"> <li>• HORTIN supply chain facilitator</li> <li>• IVEGRI / WUR technical expertise and training</li> <li>• ENZA &amp; RijkZwaan Seeds ?</li> <li>• Credit scheme ?</li> <li>• Others yet to be identified</li> </ul>	Yet to be identified	Yet to be identified	<ul style="list-style-type: none"> <li>• Ranch market</li> <li>• MataHari</li> </ul> <ul style="list-style-type: none"> <li>• Export market Singapore</li> </ul>
<b>Type of interventions / innovations (proposed by):</b>				
<ul style="list-style-type: none"> <li>• Different type of price setting and contract arrangements (producers)</li> <li>• Combined contractual arrangement for 1<sup>st</sup> and 2<sup>nd</sup> quality (producers)</li> <li>• New types / varieties small sized sweet pepper (retailers)</li> <li>• Different forms of packaging (own observation)</li> <li>• Branding of produce in combination with promotion and product information strategy; including training of staff (retailers)</li> <li>• Organic / pesticide free produce (retailers)</li> <li>• Development of processed products (including technical innovations to increase shelf-life) (retailers)</li> <li>• Linking product promotion to CSR<sup>2</sup> program (retailers)</li> </ul>				

<sup>2</sup> CSR : Corporate Social Responsibility

## 2.5 Hot pepper pilot supply chain

A quick supply chain analysis was executed in November last year and is reported in HORTIN mission report number 9. After due consideration and discussion with all partners it was decided to focus on a package of technology as adopted by farmers in Sumedang / Subang centred around improved (Hybrid) hot pepper varieties and integrated pest and disease management. This will include closed net houses to keep insects away and to minimize pesticide applications. This will be the content of the HORTIN supply chain experiments and the growers included (to be identified by EWINDO in close consultation with the HORTIN team) will be connected with two high end retail market in Jakarta and Bandung.

During this mission the following partners committed themselves to participate in a sweet pepper pilot supply chain:

- Organised producers' groups Subang and Sumedang (yet to be organized through EWINDO staff)
- Ranch Market Supermarket
- MataHari Supermarket

A first inventory on topics for experimentation in the pilot chain were explored with these partners. The results are summarised in the following table:

**Summary of partners and topics in hot pepper pilot supply chain**

Producers	Service providers	Trade and logistics	Fresh Distribution Centre	Retail market
Organised producers' groups Subang and Sumedang	<ul style="list-style-type: none"><li>• HORTIN supply chain facilitator</li><li>• IVEGRI / WUR technical expertise and inputs</li><li>• EWINDO seeds</li><li>• Credit scheme for screen houses</li><li>• HORTIN supply chain facilitator</li><li>• Others yet to be identified</li></ul>	Yet to be identified	Yet to be identified	<ul style="list-style-type: none"><li>• Ranch market</li><li>• MataHari</li></ul>
<b>Type of interventions / innovations (proposed by):</b>				
<ul style="list-style-type: none"><li>• Different type of price setting and contract arrangements (producers)</li><li>• Introduction of new variety in combination with branding (such as East West 'Super Hot' in Thailand) (producers)</li><li>• Different types of packaging (retailers)</li><li>• Organic / pesticide free production (in net houses) in combination with branding and promotion campaign (retailers)</li></ul>				

### 3. Organisation of activities

#### 3.1 Overview

The three pilot supply chains are integrated in the HORTIN program and comprise of two components:

- Facilitation of establishment and implementation of pilot supply chains
- Supply chain action research

The first component will be implemented by an Indonesian Supply Chain Facilitator, paid by the HORTIN project and based at the Indonesian Netherlands Association (INA) in Jakarta. The facilitator will be supervised by local and international staff of Fresh Studio Innovations Asia. The research component will be implemented by staff of IVEGRI and LEI.

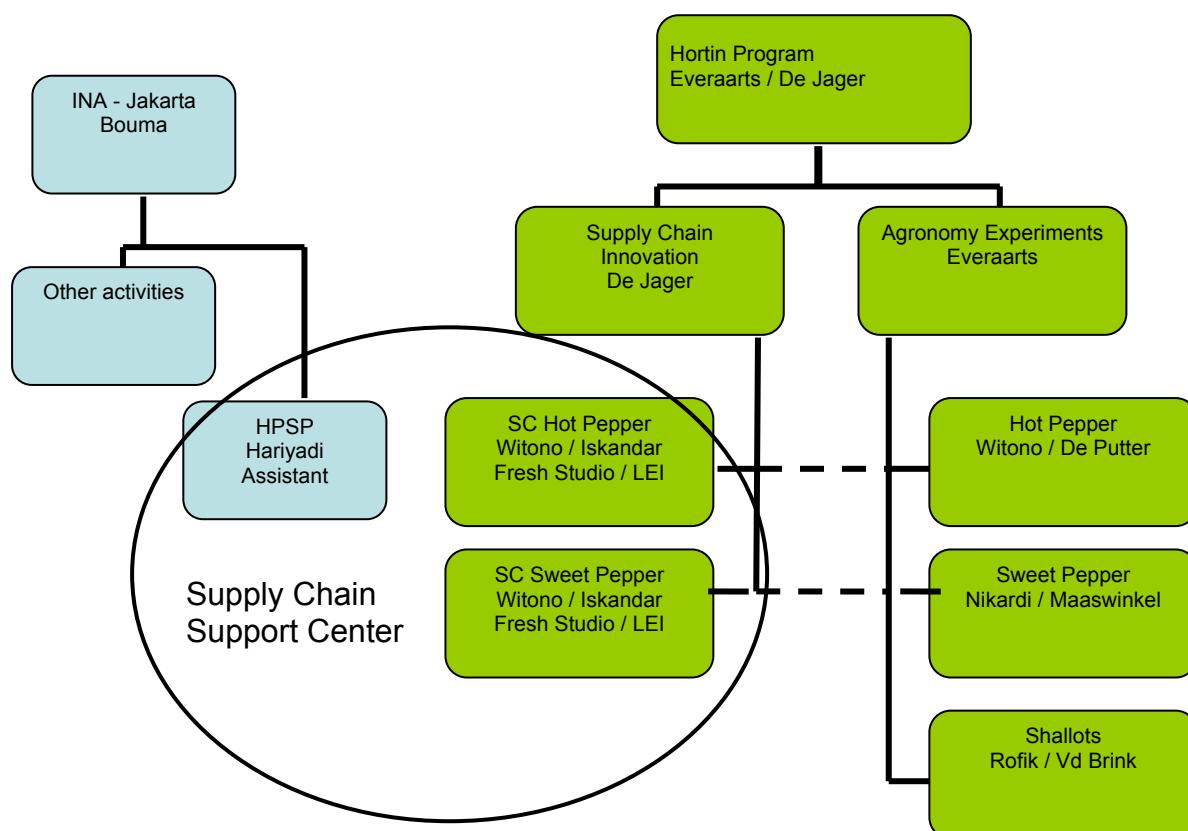
Close linkages and integration of the two pilot supply chains projects are foreseen with the agronomic experimental programs in sweet pepper and hot pepper within the HORTIN program as well as the Horticultural Partnership Support Program (HPSP) managed by INA.

Synergy with the INA managed Horticultural Partnership Program (HPSP) is pursued and the HORTIN supply chain facilitator who is on the pay roll of INA is a first step towards better cooperation. INA, WUR and Fresh Studio have identified several areas of possible cooperation and our ultimate goal is to establish a joint Horticultural Supply Chain Development and Support centre.

Synergy and collaboration between the HORTIN and HPSP is envisaged through:

- Weekly team meeting HORTIN supply Chain facilitator and HPSP management team
- Specialisation of staff (disciplines, crops and commodities etc)
- Joint projects development and management
- Efficient linking of partners with the HORTIN, HPSP or other ongoing programs

**Schematically cooperation between HPSP and HORTIN:**



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## 3.2 Supply Chain Facilitation

### 3.2.1 Job description Supply Chain Facilitator

The supply chain facilitator will have the following job description:

- Within the HORTIN project framework facilitate the set up of selected pilot supply chains linking retailers (markets) and their demand for high quality fresh fruits and vegetables and growers with their products To work out the headlines of cooperation as set by the project leader and translate these into detailed delivery schedules, quality requirements.
- Ensure smooth cooperation between partners in the pilot chains and in consultation with project leaders address problems arising during implementation of pilot chains.
- In consultation with researchers of WageningenUR, conduct data collection and specific basic research activities on various aspects of the functioning of pilot supply chains.
- Cooperate with researchers of Wageningen UR (Agricultural Economics Research Institute in particular) and assist them in preparing missions, training and capacity building and registration activities. To follow up training and research activities
- Liaison and cooperate with researchers of IVEGRI and Wageningen UR regarding experimental field work on vegetables; screen innovations from research on their potential value to improve supply chains (marketability) and test innovations under real supply chain conditions with supply chain parties involved;
- Explore new and other opportunities for linking markets with growers or vice versa using a systematic approach (this should also result in new projects for Wageningen UR and Fresh Studio)
- In close cooperation with Wageningen UR data collection and reporting for monitoring & evaluation of ongoing and new supply chain experiments and their impact (HORTIN and others)
- To cooperate with Wageningen UR, Fresh Studio and other organizations in the preparation and implementation of EU and Asia facility projects; short consultancies on request
- Linking with other relevant supply chains projects in Indonesia (e.g. HPSP)

### 3.2.2 Institutional set-up

- The facilitator will get a full-time appointment under contract with INA for a period of 12 months with possibilities for extensions
- Office and other facilities will be provided by INA;
- An operational budget (including travel) will be made available by the HORTIN II project
- The supply chain facilitator will independently conduct the above listed activities
- He / she will receive professional backstopping / technical guidance from
  - MarieJose Schouten and Marcel Stallen (Fresh Studio)
  - André de Jager and Myrtille Danse(Wageningen UR)
- WUR – LEI and Fresh Studio will continually provide case study material on supply chain research as far as the documents are published and without embargo (see Annex 2).
- During the first three months the facilitator will report to MarieJose weekly. A copy will be sent to André de Jager and Marcel Stallen. Marie Jose will have a weekly meeting with the facilitator, backed-up by Marcel Stallen if necessary. Marie Jose will discuss the weekly report, planning for the next period, persons to be met and activities to be organized. The visiting schedules and planned activities of WUR/IVEGRI researchers should be communicated in advance to the team. The primary line of support and backstopping is Marie Jose – Iskandar with backstopping/supervision of Marcel Stallen
- Employment of the facilitator, including transport, food allowances and operational budget are organised in a contractual arrangement between INA and LEI. Use of the operational budget by the supply chain facilitator needs approval beforehand of Marie Jose and Marcel Stallen.
- A personal laptop will be provided by INA to be claimed from LEI by INA
- The activities of Fresh Studio are organised in a contractual arrangement between LEI and Fresh Studio.
- After 3 months (starting March 1, 2008) the partners concerned (LEI, Fresh Studio, INA) will evaluate the above described arrangements.

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### **3.2.3 Appointment of supply chain facilitator**

Based on the results of the interviews the mission has appointed Ir. Iskandar Zulkarnain as HORTIN Supply Chain Facilitator. He has been offered a 6 months contract with a possible extension for another 6 months. His Curriculum Vitae is attached in annex III

## **3.3 Supply Chain Research**

The supply chain research program will be implemented jointly by IVEGRI and LEI. The activities will be coordinated by Witono Adiyoga and André de Jager and will include the following research staff: Rofik Sinung Basuki, Myrtille Danse, Olga van der Valk and Jan Buurma. The research team will work closely with the supply chain facilitator in implementing the research activities.

The research program will be defined in more detail as soon as the partners in the pilot supply chains and the topics to be addressed have been defined.

The research activities will focus on the following aspects:

- Conducting action research within the pilot supply chain on new chain configuration arrangements including new product and marketing concepts (see also description in previous mission report);
- Monitoring and evaluation of process and impact (base line, performance criteria, impact assessment etc.);
- Observation, analysis and learning;
- Capacity building of chain actors and research staff;
- Up-scaling and recommendations.

## 4. Planning

Activities	Planning (Month and week)	2008											
		March			April			May			June		
		10	11	12	13	14	15	16	17	18	19	20	21
<b>1. Inception and preparatory activities</b>													
1.1. Familiarization with supply chain literature and retail developments		X	X										
1.2. Familiarization with HORTIN program: previous and ongoing activities & results		X	X										
1.3. Familiarization with HPSP program and partners		X	X										
1.4. Get to know the HPSP and INA staff and procedures		X	X										
1.5. Familiarization with IVEGRI experimental work and results; visit of experiments			X	X									
1.6. Setting up communication and reporting lines with INA, M/S, MS and Adu		X	X										
1.7. Office facilities organized including e-mail address business card and laptop		X	X										
1.8. Weekly staff meeting with INA – HPSP and Fresh Studio		X	X	X	X	X	X	X	X	X	X	X	X
1.9. Introduction to DG Hort. and ICHORD					X	X							
1.10. Visit of high tech horticultural farms (amazing farms, Bogor)					X	X	X						
<b>2. Supply Chain Hot pepper</b>													
2.1. Familiarization with IVEGRI hot pepper work HORTIN; visit of experiments			X	X	X								
2.2. Connect with EWINDO, visit of their demo an test plots					X								
2.3. Meet with EWINDO farmers Subang and discuss opportunities for participation in HORTIN Supply Chain work						X	X						
2.4. Develop product and market concepts for retail markets							X	X	X	X			
2.5. Explore credit facilities for implementation								X	X	X			
2.6. Survey and analysis of supply chain; identification of bottle necks etc								X	X	X	X	X	X
2.7. Prepare for meeting with retailers; discussion with retailers together with farmers								X	X	X	X		
2.8. Develop roster of activities for implementation hot pepper supply chain									X	X	X	X	
2.9. Implementation										X	X	X	X

Activities	Planning (Month and week)	March					April					May					June					July			Aug	
		10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
<b>3. Supply Chain Sweet pepper</b>																										
3.1. Familiarization with IVEGRI sweet work HORTIN; visit of experiments																										
3.2. Connect with Cisarua farmers coop, visit of their sites and facilities																										
3.3. Visit of breeders, seed suppliers and other service providers																										
3.4. Discuss opportunities for participation in HORTIN Supply Chain work with farmers and board of Coop.																										
3.5. Develop product and market concepts for retail markets																										
3.6. Explore credit facilities for implementation																										
3.7. Survey and analysis of supply chain and farmers facilities; identification of bottle necks etc.																										
3.8. Prepare for meeting with retailers; discussion with retailers together with farmers																										
3.9. Develop roster of activities for implementation sweet pepper supply chains																										
3.10. Implementation																										
<b>4. Supply chain research program</b>																										
4.1. Mission of LEI on formulation of supply chain research program and training research staff on supply chain analysis																										
4.2. Development of appropriate and farmers' proof M& E methodology for supply chain action research																										
4.3. Implementation of baseline survey																										
4.4. Data collection using M&E methodology in hot and sweet pepper supply chains																										
4.5. Analysis and reporting (later in 2008)																										
4.6. Discussion on up-scaling (later in 2008)																										
<b>5. Training and workshops</b>																										
5.1. Training supply chain analysis (LEI)																										
5.2 Training and support producers' organisations																										

Activities	Planning (Month and week)	March							April							May							2008			
		10	11	12	13	14	15	16	17	18	19	20	21	June	July	Aug										
<b>7. Management and support including reporting</b>																										
7.1. Weekly backstopping meeting MJS Jakarta				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
7.2. Two weekly Skype meeting MS and MJS				X			X			X			X			X		X		X		X		X		
7.3. Reporting				X			X			X			X			X		X		X		X		X		
7.4. Evaluation													X											X		

## 5 Exploring additional supply chain activities

The mission explored options for related additional activities through other donors and programs enabling up-scaling and expanding of the HORTIN program. A start was made with the formulation of outlines of project proposals. An overview of the HORTIN program and possible additional activities is presented in the table below.

### Ongoing projects:

Project and project leader	Product / issue	Partners	Funding	Status
1. HORTIN domestic supply chain project 1 (A. de Jager)	Hot pepper (medium elevation)	LEI / INA / Fresh Studio EWINDO 2 retailers (Ranch Market & Mata Hari) and trading parties	HORTIN / LNV	Start March 1
2. HORTIN export / domestic supply chain project 2 (A. de Jager)	Sweet pepper	LEI / Fresh Studio Seed companies (Rijk Zwaan & ENZA) Sweet Pepper Association Cisarua 2 retailers (Ranch Market & Mata Hari) and exporter and importer	HORTIN / LNV	
3. HORTIN applied research (co innovation, Arij Everaarts)	1. Sweet pepper – agronomy and IPM	PPO, R. Maaswinkel IVEGRI	HORTIN / LNV	Ongoing
	2. Hot pepper – seedling and plant establishment	PPO, H. de Putter IVEGRI		
	3. Shallots – TSS	PPO, L vd Brink IVEGRI		
	4. Economic evaluation	PPO, M. vd Voort IVEGRI		
	5. Institutional aspects co innovation	LEI/ IVEGRI/ DG HORT		

### New projects / in the pipeline

Project and project leader	Product / issue	Partners	Funding	Status
4. EU SWITCH – sustainable retail supply chains connecting small farmers with markets	All FFV processed products	WUR / LEI, Myrtille Danse Fresh Studio, Marcel Stallen CARE, Nok vd Langenberg & Johan Kieft BISMA, micro credit scheme Ranch Market and MataHari	EU, Asia facility and HORTIN co funding	To be submitted February 28 (project brief) and May (full proposal when shortlisted)
5. Strengthening entrepreneurship of small scale vegetables producers Indonesia	Focussing on HORTIN and CARE crops and areas; synergy with 4	WUR PPO, Flip v Koesveld WUR LEI Fresh Studio, Marcel Stallen CARE	EVD Indonesia facility	To be submitted April 2008

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## 6 Other issues

During the mission consultants have also met the following persons and organisations. Excerpts of the discussions are presented below.

### *Directorate General for Horticultural Production (Dr. Achmad Dimyati and Ibu Sri Sulihanti)*

- Highly interested in pilot supply chain research in the HORTIN program; supply chain facilitator will present himself and detailed program of activities soon.
- Program will initially will focus on hot pepper and sweet pepper supply chains, but DG requests at later stage program to up-scale experiences and pilots to traditional markets and mainstream products.
- Bpk Dimyati suggests to enhance supply chain projects with access to credit schemes through newly initiated credit scheme for farmers' groups by the Government of Indonesia. The following crops are included: banana, shallots, hot pepper, potatoes and ginger; Rp 25 million is the maximum amount per loan at a rate of 7% annually; operated through a consortium of 11 banks.

**Action:** supply chain facilitator will collect more information about options for linking to this credit scheme.

- Bpk Dimyati suggests to include PT Bimandiri as processor or packaging partner in pilot projects.

**Action:** to be decided at a later stage depending on the services required.

- Action: HORTIN program management will regularly communicate progress of activities to DG.

### *Worldbank*

The mission organised a meeting with World Bank program leader agriculture, Dr. Shoba Shetty to discuss follow-up activities on the conclusions and recommendations of the recently published report 'Horticultural producers and supermarket developments in Indonesia'. At this moment no concrete follow-up activities are planned, but initiatives from donors and GoI to follow-up on the conclusions and recommendations of the report are welcome.

### *Debriefing Agricultural Counsellor*

- The counsellor, Mr. Hans van der Zijden, was very positive about the progress of the supply chain research and development program in HORTIN.
- It was suggested that HORTIN contributes to a seminar/meeting organised in November 2008 during the visit of the Dutch Minister for Economic Affairs. The HORTIN program management is requested to make the necessary budget reservations.
- The exploratory study for inclusion fruits in HORTIN needs to be implemented in 2008. The HORTIN program management is requested to start planning for this activity.
- The status of the additional K€ 100 for research in fruits is yet unclear. In case of final approval the following activities are suggested:
  - MRL's, GlobalGAP and Post-harvest issues in mango's and mangosteen (global draft proposals have been made available)
  - Exploratory regional market study for foliage products (in case no options in LNV BO-program).

**Annex I. Itinerary**

HORTIN program Andre and Marcel		
<b>Sat/Sun Feb 9/10</b>		
	Travel Amsterdam - Jakarta	André
<b>Monday Feb 11</b>		
Morning	Prepare for this weeks program	Andre and Marcel
12.30 hrs	INA / HPSP, Elmar Bouma	Andre and Marcel. Explore opportunities for office sharing and on INA pay role
13.30 hrs	HPSP, Haryadi program leader	Developments within HPSP program and mode of cooperation
16.00 hrs	Worldbank, Dr Shoba Shetty	Follow up on world bank study on retail markets
<b>Tuesday Feb 12</b>		
10.00 hrs	Interviews candidates & evaluation	Andre, Marcel
Afternoon	Transfer to Bandung / Lembang	Overnight Lembang / Bandung
20.00 hrs	Meeting EWINDO, Rien Rodenburg Bandung	Marcel, Andre
<b>Wednesday Feb 13</b>		
9.00 hrs	IVEGRI meeting with Rofik, Witono and Nikardi	Andre, Marcel
Afternoon	Meeting with paprika coop. Cisarua	Andre, Marcel, Nikardi / Witono finalization of arrangements
Evening	Return to Jakarta	
<b>Thursday Feb 14</b>		
9.30 hrs	2 <sup>nd</sup> series of interviews with candidate	Andre & Haryadi & Witono at INA office
11.00 hrs	INA Elmar on final arrangements	Andre and Marcel on office sharing, contract etc
14.00 hrs	meeting with Foodmart / Ranch market, Mrs Cara I. Kebon Jeruk.	Andre , Marcel and Witono. For participation in HORTIN program; headlines of cooperation
18.00 hrs	Dr Achmed Dimyati	DG Horticultural Production
20.00 hrs	MarieJose Schouten	Meet Andre at Grand Kemang
<b>Friday Feb 15</b>		
9.00 hrs	Matahari retail dept, Karawaci Head office	Andre and Marcel. For participation in HORTIN and EU SWITCH headlines of cooperation
13.00 hrs	Embassy Mr. Hans vd Zijden	
14.00 hrs	Hans vd Zijden and Theo Hadinata	
15.00 hrs	CARE EU SWITCH program; Johan Kieft	Marcel & Andre
16.00 hrs	Transfer to airport	
19.00	Departure Marcel and Andre	

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**Annex II. Sources of information Retail supply chains**

Title and source of information	To be provided / send by
1. DVD with all previous HORTIN reports	Arij Everaarts / Andre de Jager
2. Reports of TOPS project Thailand	Marcel Stallen
3. LEI surveys of retail sector developments China including Vegsys studies (Xiayong Zhang)	André de Jager
4. Links to Regoverning markets program; selected reports and World bank report on Indonesian producers and retailers (two more Word bank reports are in the pipe line)	Marcel Stallen
5. Link to Swiss discussion website on impact of retail developments on small scale producers	Marcel Stallen
6. Proceedings Wageningen UR congress on supply chains 2004	Marcel Stallen
7. Proceedings / book about Tropical fruit supply chains organised by J Trienekens Wageningen Centre for network studies)	André de Jager
8. Publications Fresh Studio on connecting farmers with markets	Marcel Stallen
9. Book 'Producer organisations and market chains; facilitating trajectories of change in developing countries' (Giel Ton et al.).	André de Jager

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### Annex III. Curriculum Vitae Iskander Zukarnain

## CURRICULUM VITAE



### Personal Data

Name : Iskandar Zukarnain  
Address : Jl. Amaliah No. 49  
RT. 04/05 Ciawi Bogor  
Indonesia  
Zip code : 16720  
Phone : +62 251 246 364  
Fax : +62 251 249 336  
Cellular : +628 567 089 043  
Date of birth : 20 - 06 - 1968  
Place of birth : Palembang  
Nationality : Indonesia  
Marital status : Married  
Sex : Male

### Formal Education

1993: Diploma (S-1 degree) Djuanda University, Bogor-Indonesia  
Specialization: Agriculture  
Main subject: Agronomy  
1988: Passed from Agriculture Senior High School, Palembang-Indonesia  
1985: Passed from Junior High School, Palembang, Shout Sumanteria, Indonesia "SMP Negeri 3 Palembang"  
1982: Passed from Elementary School, Palembang, Shout Sumatera, Indonesia "Madrasah Ibtidaiyah Negeri I Teladan Palembang"

### Training

November 1989 Student Management Skill Training (2 days) held by Djuanda University  
Mei 1991 Student Management Skill Training (5 days) held by Bogor Agriculture Institute  
Oktober 1991 Leadership and Management Organization Training (6 days) held by Bogor Agriculture Institute  
September 1999 Leadership Awareness Training (3 days) held by Man Power Department of Republic of Indonesia  
Jan-April 2001 International Trade (Export Management) Course, HAS Den Bosch, University of Professional Education, 's-Hertogenbosch, The Netherlands.  
April-July 2001 International Horticulture Course, HAS Den Bosch, University of Professional Education, 's-Hertogenbosch, The Netherlands

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### Organization

June 2000 -2003:	Chairman of Alumny Assosiation of Agriculture Faculty of Djuanda University
June 2000 - 2001:	Chairman of Bina Tani Persada Foundation
October 1999 - Now:	Chairperson Compartemen of Agriculture of Chamber of Commerce and industry Bogor regency.

### Working Experiences

Aug. 1991 - Aug. 1992	Djuanda University, Bogor Teacher of Computer Programming (BASIC Language)
April 1991 - Feb. 1994	PT. Tunggul Kawung, Bogor (Engeenering Consultant Company) Assistant for Budget Planning Manager
Feb. 1994 -March 2002:	PT.JORO (Supplier of horticultural industry) Responsibilities in import planning, stock management, products distribution, etc.
March - June 2002	CV. Andalas Prima Mandiri, Bogor Setting Up New Company:
Oct. 2002-now	Djuanda University, Bogor Lecture of Enterpreneurship Education

### Languages

Indonesian:	Mother tongue, written and spoken
English:	Moderate, written and spoken

### Special skill

Experience in MS-Windows, MS-Word, MS-Excel, MS-Power Point, MS-FrontPage, MS-Visual FoxPro, Adobe Photoshop, WS\_FTP, GIF Animator And the internet.

### Hobbies

Swimming, reading, fishing