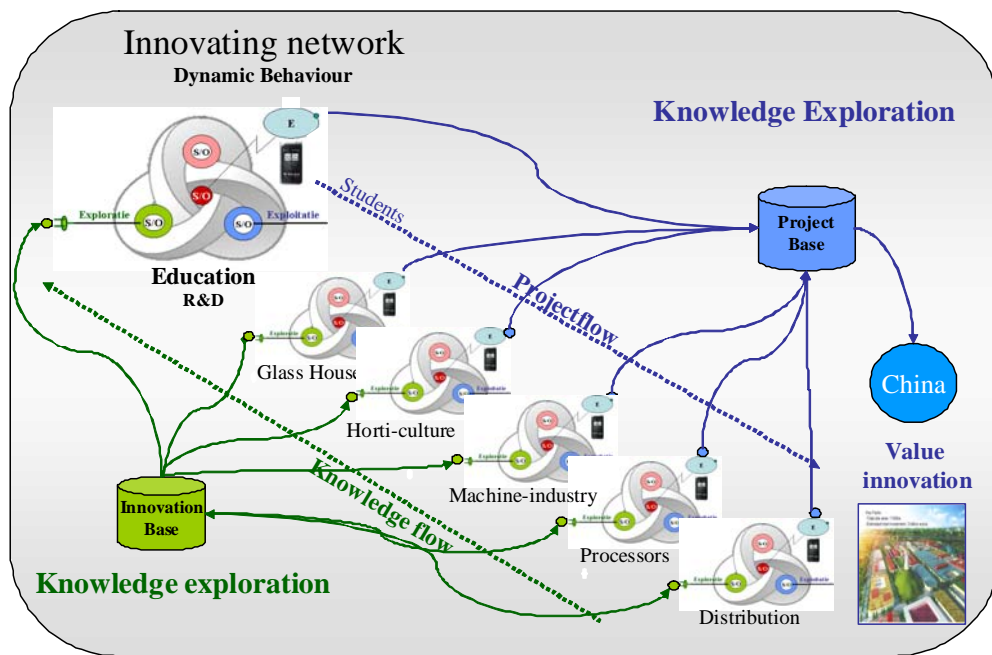


International Research & Education on Innovation

Status Report Project Total Solution for China



SME and Education in dynamic innovating networks

Document P.4.2.4.1. Status Report

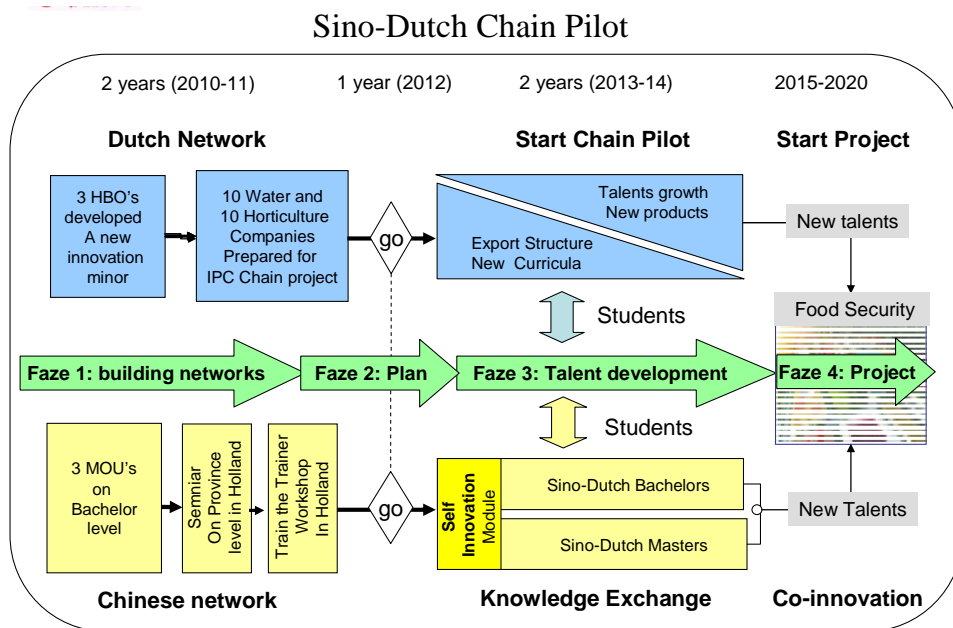
Index

1.	Introduction	3
1.1.	Why the Province Zuid Holland:	4
1.2.	Initiation of the Dutch innovation network.....	5
1.2.	Starting up the Chinese innovation network.....	6
1.3.	Hebei Education delegation, 3-7 november 2010	8
1.4.	Follow-up meeting in Hebei in November 2010.....	8
1.5.	Follow-up meeting in Holland April 2011	9
1.6.	Follow-up meeting in Hebei in May 2011	10
1.7.	Final results: a global innovation network.....	11
2.	Workshop on innovation in Holland	12
2.1.	Education delegation Province Hebei China June 2011	12
2.2.	Involvement Dutch Side	13
2.3.	Involvement Chinese Side	13
3:	Preparing a Sino-Dutch agreement.....	15
3.1.	Report on preparation meetings in China, June 2012.....	15
3.2.	Letter of Intent on Innovation Research	17
3.3.	Items to agree on in the meeting in august 2012.	18
4.	Evaluation meeting in august 2012.....	19
5.	Results activities in 2013	22
5.1	Revival System Theory University of Delft	22
5.2.	International R&D network on learning and innovation	23
6.	Dutch Investment plan	

1. Introduction

The History of the Sino-Dutch project goes back to 2010. The first two years (2010-2011) were used to grow awareness and build networks in the Netherlands and China. This year (2012) we worked out the parts of the project on Dutch side, from the mirror perspective to China. Now the point is reached to connect them by the adoption of the plan for China, adapted to the culture of China. During the next years (2013-2014) partners involved in the project can grow together in competences tot realize a Sino-Dutch MFS pilot. Ambitious and scope are multi-level and plans are prepared on regional, province and national level.

Plan stage in the Netherlands finished with the production of three plans: one for the Agro-food (Top) sector (Jan Hak), one for Horti-culture (Sjaak van der Tak) and one for the design of an export structure involving 20 SME's, education (Topsector Agro-horti) and the government of EL&I. China plan phase started with our visit to China this year. May 2012 we signed a letter of intent with our partner the education bureau of Hebei and promised to prepare a quotation on a starting project. This quotation provides for two workshops in October 2012 as a base for decision making about the participation in a sustainable project on innovation research, standardisation and further cooperation in FMS-projects.



1.1. Why the Province Zuid Holland:

South-Holland Hebei Co-Development Program



Visit of Hebei Education Department Delegation, October 2010

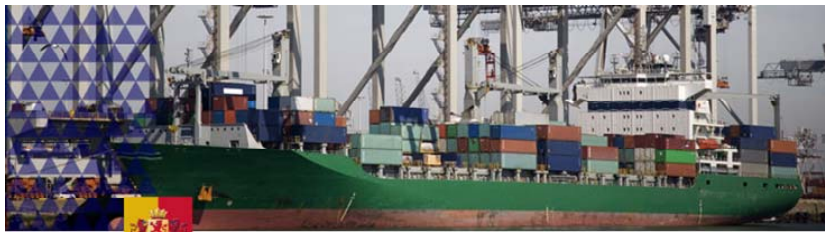
The Hebei Education Department Delegation will come to Zuid-Holland Province for a working visit in the framework of the Zuid-Holland Hebei Co-development program in October 2010.

The main purpose of this visit is to further discuss and implement the agreements in the Letter of Intent, signed by the two provinces in June 2010; besides, it will promote the academic communication and research cooperation between the two provinces in the field of agriculture, environmental engineering and water management; in addition, the establishment of Confucius Institutes and classes will be discussed, and strengthen the secondary vocational education cooperation.

Hebei education department visiting Zuid-Holland province, June 2011

At the end of May and the beginning of June, a delegation from Hebei Education department will visit Zuid- Holland Province. This mission would serve the purpose of education and knowledge exchange between two regions. Several workshops and site visits will be organized, and the key topics which will be discussed during the visit:

- The training and exchange programs for lecturers and students between knowledge institutes from Hebei Province and the Netherlands;
- Cooperation in constructing Confucius Classroom;
- Knowledge exchange of financial audit management for knowledge institutes;



Exporteren van totaal oplossingen



Key Facts:
 - Total site area: 1100ha
 - Estimated total investment: 3 billion euros



1.2. *Initiation of the Dutch innovation network*

For the formation of a core team of coaches and experts, the following organisations and persons have been consulted:

Gouvernement:

- Province Zuid Holland: Jean C. Spapens
- Gorinchem City: P. IJssels. Mayor
- Drechtsteden, Kinderdijk region: R. Houtman, Mayor

Industry:

- Industriële Kring Gorinchem (IKG), A. de Hoog-Attema, chairman.
In this region companies are located such as Damen Shipyards, Mercon, van Oord and Attema, which have been involved in earlier MI projects.
- Twenty SME Horti-culture companies of Greenport organisation of mayor Sjaak van der Tak

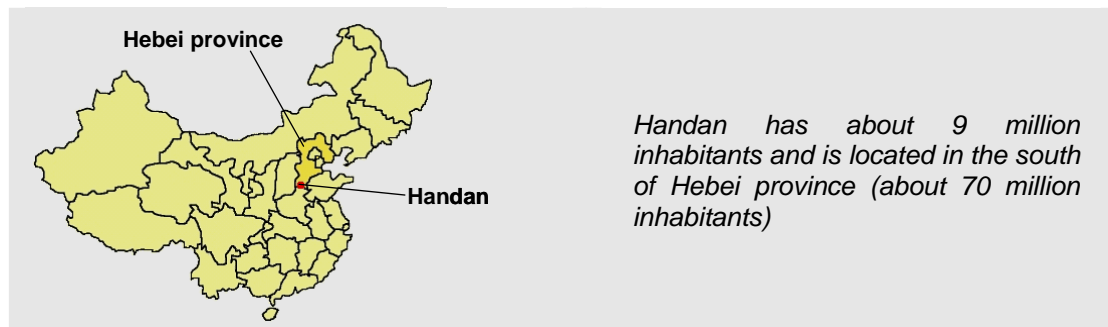
Educational institutes:

- **HBO Inholland:**
HBO InHolland (D. van Bijl, director Technology and partner IPC-MKB programme). was co-developer of the minor Methodological Innovation and, together with two other HBO's, involved in 15 pilots on-the-job-training for the machine building industry. InHolland has contacts with Hebei University of Science and Technology (HEBUST) for a collaborative programme. It has also a special division for the agro-food sector, thus enabling collaborative projects for machine-building for this sector.
- **University of Wageningen:**
The University of Wageningen is one of the top-universities in the world specialised in the agro-food sciences. The department of Education and Competence Studies (Prof. M. Mulder and H. Kupper) covers the entire knowledge infrastructure for food and environment. It is familiar with new teaching concepts and supports also professional education studies. It co-operates with the Erasmus University in Rotterdam Jan Rotmans, director of DRIFT (Dutch Research Institute for Transitions).

1.2. Starting up the Chinese innovation network

This orientation focuses on the province Hebei, for two reasons. The first is the existence of a collaborative programme between the provinces Zuid Holland and Hebei, which enables us to make use of an available infrastructure for knowledge exchange on many subjects, including education.

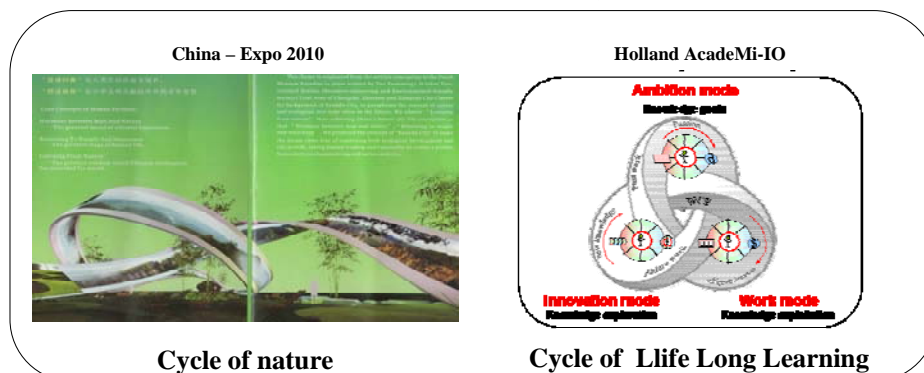
The program in Hebei, september 2010



Between 12 and 18 September 2010 Theo Lohman, board member of AcadeMi-IO and Human Resource manager of Quaternes, and Wim Gielingh, Managing Director of AcadeMi-IO, visited two schools in Handan and a university in Shijiazhuang, and had several other meetings with Chinese officials, with the goal to present and discuss the initiation of an AcadeMi-IO in China.

- 14 September 2010 A.M. Visit of two secondary schools in Handan, see also <http://www.hdzt.net.cn/> and <http://www.hdvtc.edu.cn/>)
- 15 September 2010 A.M: Hebei University of Science and Technology (Shijiazhuang). Meeting with James Zhai (Foreign Affairs Office director) and Zhanzhong Jin (Vice President, supervisor PhD).
- 15 September 2010 P.M: International Cooperation & Exchange Division Hebei Province; meeting with Hou Jianguo (Director).
- 16 September 2010: Lunch meeting with Yuan Xiuzhong (Education Bureau Handan City).
- 17 September. Visit World Expo Sjanghai.

Sustainable economy



Impressions

- **Lower to medium level education.**

The first school visited in Handan (<http://www.hdzt.net.cn/>) is comparable with VMBO/MBO (lower to medium level education) in the Netherlands. What we have seen touched mainly mechanical and electrotechnical subjects. We noticed that the technical subjects were solely followed by boys, while girls were solely involved in more 'female' subjects such as garment manufacturing, ballet and music making. The general impression was very positive, featuring a very disciplined working style, state-of-the-art educational material, and modern tooling and equipment.

- **Medium to higher level education.**

The Handan Polytechnic (<http://www.hdytc.edu.cn/>) is comparable with MBO/HBO in the Netherlands. It eyed less formal than the VMBO/MBO school. Director and key staff members were very friendly and open. Focus for our visit was on construction. Computer are well used and focussed to draughting. The exchange of knowledge models (Building Information Modelling BIM) might be fruitful as well on the subject of sustainable construction methods. Given the huge growth requirements of the city of Handan, sustainable architecture and construction is urgently needed and could be exchanged through the collaborative programme¹.

- **Academic / scientific level, province Hebei.**

As there is no education on technical subjects on academic level in Handan, an introductory meeting was arranged with Prof. dr. James Zhai (director Foreign Affairs Office) and Prof. dr. Zhazhong Jin (vice-president, meeting only during lunch) of the Hebei University of Science and Technology in Shijiazhuang. This is the only Technological University near Handan that educates on MSc and PhD level. The University complex with campus, located outside the town, is recently built and eyes modern and spacey. Current capacity of 25,000 students will be extended to 30,000 next year. A collaboration programme with InHolland in the Netherlands is currently being discussed.

Due to the late announcement of our visit we were not able to speak with professors on specific topics. But after discussion, Prof. Zhai was able to summarize the objectives of AcadeMi-IO very well, so that we feel confident that collaboration with HEBUST will be fruitful.

- **Academic / scientific level, national (China).**

We feel that it is important to establish also a good collaboration with universities that are scientifically comparable with Netherlands top-universities, such as Delft (technical, design), Wageningen (food, agriculture, environment) and Erasmus (economics, human sciences).

The educational organisations as well as the governmental representatives demonstrated a very positive attitude towards knowledge exchange, knowledge circulation and entrepreneurial learning. In particular the development of common curricula for talent development with on-the-job training facilities offered by the agro-food machinery park in Handan was welcomed. The will to collaborate with the Netherlands initiative was expressed in all the meetings we had so far.

1.3. Hebei Education delegation, 3-7 november 2010

The delegation consists of 5 people, and they are,

1. Yan Chunlai, Vice Director of Provincial Education Department
2. Ji Lianggang, Vice President and Professor of Hebei University of Economy and Trade
3. Pei Yinshan, Vice President of Environmental Management College of China
4. Zhao Guoshang, Director of Hebei Examination Center of Secondary Education
5. Gao Xiao (Interpreter), Vice Director of Foreign Language Teaching Department, Hebei University of Economy and Trade

In a workshop in the **Stevinkamer of KIVI Den Haag** the methodical Innovation project is presented by Mr. Lohman and W. Gielingh of the AcadeMi-IO. After a fruitful discussion the delegation decided that the approach might be of interest for the Province of Hebei and if so the Provincial Education Department wants to be involved directly by participation in a possible AcadeMi-IO in China. Mr. Luo Ping attended the meeting and emphasized the involvement of University of Wageningen.

1.4. Follow-up meeting in Hebei in November 2010

- November 22: Meeting with International Cooperation & Exchange Division of Hebei Provincial Education Department. Present: Mr. Hou Jiangou (Director), Mr. Liu Jiangyi (Deputy Director), Mr. Rinus Houtman (Mayor Nieuw-Lekkerland), Mrs. Floriske Deutman (Program Manager South Holland-Hebei Co-Development Program) and Mrs. Sarah Sijses (Project officer China NL EVD International).
- November 23: Meeting with the Education Bureau of Handan City. Present: Mr. Zhao Haojun (Director), Mr. Yuan Xiuzhong (Chief International Service Center), Mr. Theo Lohman, Mrs. Sarah Sijses and Mrs. Madeleine van Mansfeld.
- November 24: Presentation of AcadeMI-IO to the Education Bureau of Handan City and Handan Polytechnic College. Present: Mr. Zhao Haojun, Mr. Yuan Xiuzhong, representatives of vocational colleges and Mr. Theo Lohman and Mrs. Sarah Sijses. As a result a MOU is signed.

MOU HANDAN



- November 24: Meeting with the Foreign Affairs Office of Hebei University of Science and Technology (HEBUST). Present: Mr. James Zhai (Director), Mr. Rinus Houtman, Mr. Theo Lohman and Mrs. Sarah Sijes.
- November 26: Presentation of AcadeMI-IO to the Administrative Committee of Changzhou Bohai New Area (1), Hebei Zhongjie Vocational School (2) and Cangzhou Vocational College of Technology (3). Present: Mr. Jia Falin (Deputy Director 1), Mr. Sun Yuhe (Rector 2), Ms. Lisa (assistant of Mr. Sun Yuhe), Ms. Liu Chong (Director International Student Exchange Department 3), Mr. Theo Lohman and Mrs. Sarah Sijes.

1.5. Follow-up meeting in Holland April 2011

A Chinese delegation from Hengshui visits the Netherlands after the meeting in November 2010 in China. There was signed an agreement on a twelve point program on future cooperation with Greenport, education institutes and the AcadeMI-IO.

- Mr. Zou Liji, Vice Mayor of Hengshui People's Government
- Mr. Zhao Chunbin, Chief Engineer of Hengshui Park and Landscape Bureau
- Mr. Zhang Fengjun, Director of Hengshui Forestry Bureau
- Mr. Xu Bing'an, Deputy Director of Hengshui Foreign Affairs Office
- Mr. Hou Guining, Director of Hengshui Education Bureau
- Mr. Yang Aimin, Deputy County Head of Raoyang County

After a presentation of Dutch companies and education institutes a MOU is signed to cooperate on innovation with the Academy IO, the Hogeschool InHolland and the Education bureau of Hengshui.

MOU HENGSHUI



1.6. Follow-up meeting in Hebei in May 2011

The Netherlands Horticulture Trade Mission to the People's Republic of China,

Organized by: Ministry of Economic Affairs, Agriculture and Innovation of the Netherlands (EL&I) and **Co-organized by:** Dutch Manufacturers of Machinery for Food Processing and Packaging (GMV). In Shijiazhuang Luquan, met the government from Luquan County (agricultural, vegetable county from Shijiazhuang) and Education Institutes. Signed a MOU with Luquan Vocational School.

MOU LUQUAN

MOU Luquan Vocational School, Hebei China



Mechatronics Laboratorium

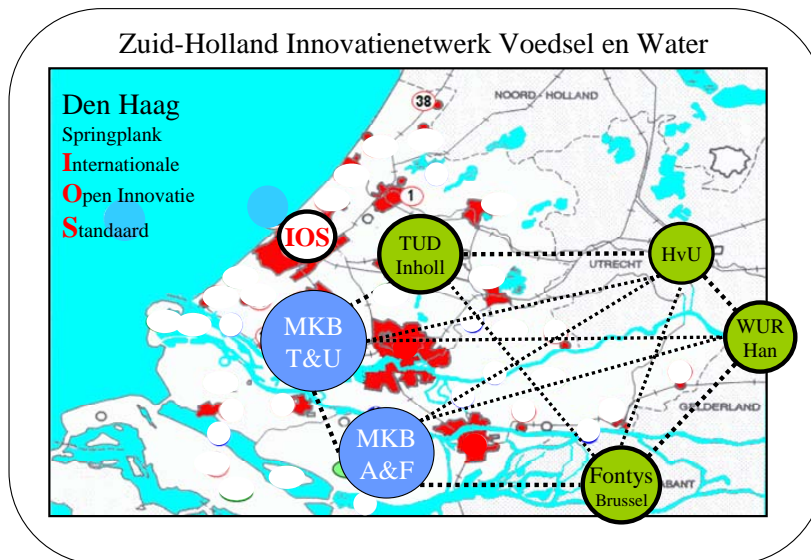


Mr. Liu Zhenguang, T. Lohman
Luquan 10-05-2011

1.7. Final results: a global innovation network



Zuid Holland Innovation Network



Hebei Innovation Network



2. Workshop on innovation in Holland

2.1. Education delegation Province Hebei China June 2011

The delegation consisted of the following members:

Mrs. Guo Jingru, Deputy Director of Education Bureau of Hebei Province
Mr. Yang Wenhui, Vice Dean of Mechanical Engineering Institute of Hebei University of Technology
Mr. Li Junqing, Vice President of Hebei University of Agriculture
Mr. Ran Longxiang, Director of International Cooperation Department in Hebei University of Agriculture
Mr. Liu Jiangyi, Deputy Director of International Cooperation and Exchange Department of Education Bureau of Hebei
Mr. Wang Lei, chief representative officer South Holland-Hebei Codevelopment program



Figuur. De Chinese onderwijsdelegatie op bezoek bij MKB in het Westland

Participants.

AcademIO

Mr. Theo Lohman
Mr. Wim Gielingh
Mr. Bart Gerritsen

Chinese Embassy in The Netherlands

Mr. Luo Ping

counselor education section

Delft University of Technology

Mr. Cees de Bont

dean faculty industrial design

Mr. Hans Veeke

assistant professor industrial design

Mr. Zoltan Rusak

assistant professor industrial design

Mrs. Regine Vroom

lecturer design engineering

DHV Ingenieursbureau

Mrs. Tiffany Tsui

senior business developer

IHC Merwede

- Mr. Ton de Gruiter

manager IHC parts & Services China

InHolland University of Applied Sciences

AcadeM^{ic} - IO

Mr. Peter Scheerder	dean unit agriculture
Mr. Hans Ligtenberg	senior lecturer unit agriculture
Ministry of Economic Affairs	
Mr. Jeroen van den Brink	project officer Agency NL
Rijnplant	
Mrs. Chaoyi Lin	account manager
Syntens	
Mr. Harald Feijth	innovation adviser
Van Hall Larenstein U. of Applied Sciences	
Mr. Heinz Evers	course manager
Wageningen University and Research Centre	
Mr. Jan Fongers	coordinator international relations
Mr. Hendrik Kupper	senior researcher
Mr. P.J. Beers	researcher
Westland Municipality	
Mr. Sjaak van der Tak	mayor
Mrs. Marga Vintges	senior policy maker greenports
Mr. Antoon van de Ven	senior policy maker international affairs
Zuid-Holland Province	
Mr. Jean-Christophe Spapens	European & international affairs
Ms. Renate Beausoleil	senior policy advisor education
Mr. Guus van Steenbergen	program leader Greenports

2.2. *Involvement Dutch Side*

1. Overheid	
E&NL / Topsectoren	
Mr. A. Umland	Verbinden topsectoren HRM
Mr. E.D. Hurster	Verbinden topsectoren HRM
Mr. E. Wijnen	Interoperabiliteit (ICT)
AgentschapNL	
Mr. J. van den Brink	IPC coordinatie
Mr. H. Lengkeek	IPC adviseur
Chinese ambassade / China	
Mrs. L. Merks	Development Cooperation
2. Provincie	
Economische Zaken	
Mr. W. Brandsma	Hoofd Economisch Zaken
Mr. J.C. Spapens	Internationale Zaken
Mr. A.A.C. van Steenbergen	Greenport
3. Gemeente	
Westland	
Mr. Sjaak van der Tak	Burgemeester
Mr. Antoon van der Ven	Chinabeleid
Mr. Marga Vintges	Europese Zaken / Greenport
Gorinchem	
Mr. Piet IJssels	Burgemeester
Mr. Arjen Nieuwland	Economische zaken
Nieuw Lekkerland	
Mr. Rinus Houtman	Burgemeester

2.3. *Involvement Chinese Side*

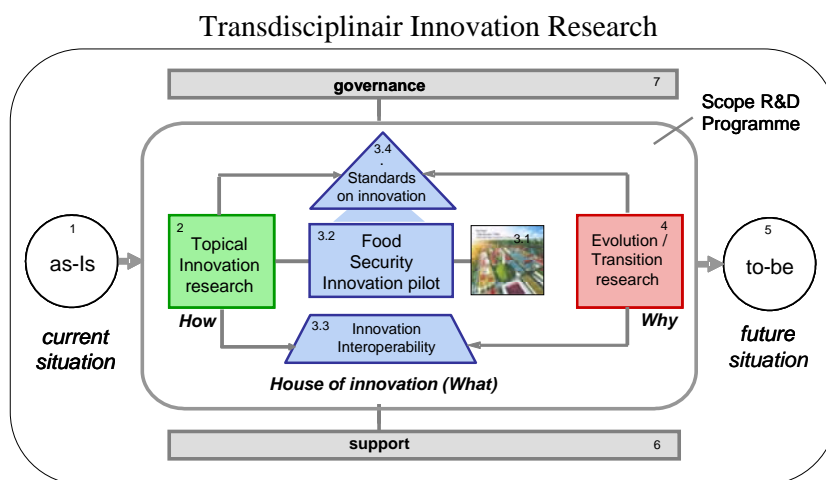
1. Overheid nationaal	
Chinese ambassador in NL	
Mr. Luo Ping	First secretary
2. Provincie Hebei	
Onderwijs Department	

- Mrs. Guo Jingru,
Mr. Liu Jiangyi,
Mr. Haiun Zhai,
3. Gemeente / MOU on innovation
Handan
Mr Guo Dajian
Mr. Zhao Haojun
Henghsui
Mr. Zou Liji
Mr. Hou Guining
Mr. Ren Zhongxiu
Luquan
Mr. Dong Xia Hang
Mr. Liu Zhenguo
- Deputy Director of Education Bureau Hebei EBH
Deputy Director of International Cooperation EBH
Deputy Director General of Department of Education
- Mayor
Director Education Bureau (MOU)
- Vice-Mayor
Chief Bureau of Education(MOU)
Vice director office of education
- Mayor
Pres. Luquan Vocational (MOU)

Sino-Dutch Workshop – Education Delegation

Wk 25 2011	Metropolitan Food Security Monday	House of Innovation Tuesday	Transition / Future Wednesday
8.30 11.00	1. Welcome; Inholland / TUD Workshop 1; Innovation Program 2. Common Challenge; Metropolitan FS 3. Innovation knowledge, skills, program	Workshop 3; Human Centered Approach 1. System Dynamics / Hans Veeke 2. Human Centered Computing /Rusak 3. Rabobank; Cooperation / Klink	Leisure Utrecht
12.30	4. Welcome Mayor vd Tak (11.30) • Cooperation between ZH and Hebei • Between Industry and Education	4. Intelligent networks Sys. / Gerritsen 3. Systemic-innovation (Theo Lohman) 4. Modular-innovation (Wim Gielingh)	Leisure Utrecht
13.00 14.30	Lunch Demo-Kwekerij Greenport Campus (Antoon van der Ven)	Lunch Museum Dordrecht + Visit (1/2 hour) AcadeMi-IO (Theo Lohman)	Lunch Restaurant of the Future Wageningen University (Jan Fongers)
14.30 17.30	Workshop 2; Technology in Practice 1. Visit Demo-Kwekerij 2. Experiences with China (Lightenberg) Meeting Province of Zuid Holland 3. Confucius Classroom 4. Van Hall Lahrenstein	Workshop 4; Innovation in Practice 1. Presentation Chinese delagation 2. HRM Trends in Europe / 't Hart, IS 3. Innovation Practices / Feith, Syntens 4. Innovation Performance /Brink, Agency	Workshop 5; Plan for the Future 1. Aim and Strategy AcadeMi-IO (Hak) 2. Application GMV in China (Hak) 3. Transition Strategy (WUR/Erasmus) 4. Evaluation / Plan Proposals/ Actions
18.30 21.00	Dinner by Gemeente Westland (Sjaak van der Tak)	Dinner by Province S.Holland (Wiebe Brandsma)	Dinner By-By, Amsterdam Gemeente Gorinchem / AcadeMi-IO

Tabel. Workshop programma om te komen tot een gedragen innovatie researchplan



3: Preparing a Sino-Dutch agreement

3.1. Report on preparation meetings in China, June 2012

Friday 25th May: Meeting with officials of Hebei Education Department, Shijiazhuang.

Mr. Zhai Haihun, Deputy Director General Hebei Provincial Education Dep.
Mr. Hou Jianguo, Director, International Office Hebei Education Dep.
Mr. Li Shoumin, Deputy Director, International Office Hebei Education Dep.
Mr. T.A.M. Lohman, vice President AcadeMi-IO, Topics discussed:

- Train the trainer of Sino-Dutch professors on Innovation
- The development of an international standard on innovation
- The development of a Sino-Dutch research program on innovation

Actions: 1. Prepare a Letter of Intent on Innovation
 2. Prepare Presentation for professors of the Hebei University

Monday 28-29th May: 2012 Spring World Congress on Engineering Technology Xi-an.

- Presentation Paper Id. 31552. *How the Liberation of Human Talents can Leverage the Innovation Potential of Industrial Enterprises*
- Meeting with Prof. Uri Shafir. University of Toronto Canada. *Learning Engineering in the Digital Age with Pedagogy for conceptual thinking.*
- Meeting with Prof. Xin-She Yang. National Physical Laboratory London. *Global Optimization in Engineering: What can we learn from Nature?*

Action: prepare an international mini-seminar in Hebei, August 2012.

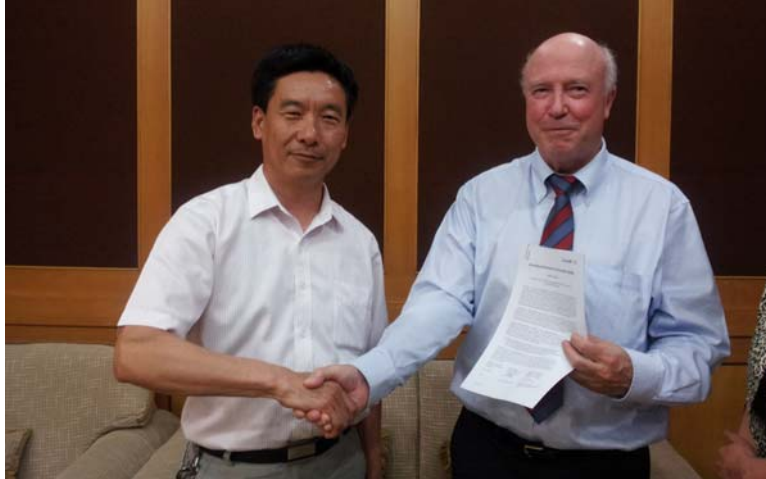
Wednesday 31st May: Presentation for Hebei University of Science and Technology in Shijiazhuang

- Xu Youngzan, Prof. Director International Exchange Center.
- James Zhai. Prof. Director International Languages / Innovation
- Zhang Dongwen. Prof. Informatics and Science.

Action: organize a 3-day workshop on innovation for about 20 professors in Hebei – China.

Wednesday 31st May: Evaluation meeting with the directors of Education Department

- Mrs. Guo Jingru, Deputy Director General (participant of workshop on innovation in Holland, June 2011).
 - Mr. Yan Chunlay, Deputy Director General (member of the education mission in October 2010 in the Hague Holland).
 - Mr. Xu Youngzan. Director International Exchange Center (see Picture)
- Actions: Concept program and budget indication for next actions on Train the trainer, Innovation Standards and Research Plan and action 2; Investment ca. 100.000 euro on both sides (Holland / China) for preparing solid plans / and better understanding of the programs and to prevent misunderstanding.



Thursday 1st June Meeting in Beijing; Ministry of Education, People Republic of China

- Mr. Luo Ping, Director Division of International Organisations
- Mr. Yang Xiaochun, Director Division of European Affairs.

Actions: Learn together from past projects. Support of Province of Hebei on International Aspects. Additional information on International Innovation Research programme and the Dutch NEN commission on standards

Thursday 1st June Meeting in Beijing; Embassy of the Kingdom of the Netherlands

- David Pho, Education Representative of Holland in the Republic of China
Action: David contacts AgentschapNL, J. van der Brink on IPC Program.

3.2. Letter of Intent on Innovation Research

International Research on Innovation Ability

Letter of intent

between Province Hebei Education Department, Provincie of Zuid-Holland
and AcadeMI-IO foundation

This Letter of Intent should be regarded as a next step towards a common Sino-Dutch agreement on an innovation programme to be signed in August 2012 in China. The aim is to develop a Common research program on Innovation, a common ISO international dictionary on Innovation and a train the trainer program on innovation to accelerate the exchange of knowledge between Education and Industry and between South Holland and Hebei. On individual level the aim is to develop human capabilities concerning continuous learning, improvement and innovation in educational institutes and in the context of an entrepreneurial business culture. Such capabilities reinforce each other and guide companies to World Class Performance. The approach followed will be in line with postmodern organizational thinking and bridge the gap between education and industry (subject/object).

In the approach, Organisational Interoperability is essential and requires not only trans-disciplinary personal skills of employees, but also the adoption of a common language for collaboration and innovation. As such a common language cannot be developed and accepted by a single organisations, it requires joint involvement of businesses and education on multiple levels, individual, organisational and the value chain for total solutions. The development of such a multi-level knowledge infrastructure will therefore be facilitated by the responsible regional and/or national authorities.

From the innovation system it requires a more integrated approach of semantics, learning and systemics to make better use of the talents of actors; people, organisations and value-chains. A practical proven methodology enables People to empower their Talents, self-learning capabilities form Role to Role and form Job to Job. Employees are given the time and freedom to develop their personal talents as well as their team skills, so that they can optimize their value to their own ambitions and the organisation goals. This approach is fully in line with the Confucius way of thinking and the performance is in line with the CMMI-standard.

The Political interoperability is a shared vision on innovation on National Level as described

1. In China's vision on Revitalizing China through Science, Technology, Education (p.35)
2. In Dutch vision on Revitalizing entrepreneurship; To the Top. A new innovation strategy with a focus on nine topsectors and five integration aspects (Topsectoren).

This letter of intent is on Provincial level and in line with the 3 MOU's signed on City level in Hebei and South-Holland in the context of the development of Metropolitan Food Security Systems with the support of Dutch expertise on Agro-food, Horticulture, Water Supply and Harbour Management and High-tech Machinery and with the innovation language as an essential integrator. See Addendum. It is also in line with the ambitions and the findings of the three-day workshop-results of the delegation of the Province Hebei under coordination of Mrs. Gou Jingru and Mayor Sjaak van der Tak of Greenport in June 2011 in Holland.

Province of Zuid Holland
European and International
Department

Mr. J. Spapens

Date:

Province Hebei
Education Department
International Division

侯建国
Mr. Hou Jianguo

Date: 29/05/2012

AcadeMI-IO foundation
Education & Research
On Methodic Innovation

Mr. T. Lohman

Date:

3.3. Items to agree on in the meeting in august 2012.

The Sino-Dutch cooperation on innovation started in 2010 and was followed by a seminar in 2011 in Holland. There is a base for a second workshop in China to meet experts and to get a better understanding of the new developments around innovation. We suggest therefore a:

Discovery mini-seminar on innovation and making better use of people talents.

mini-seminar of one or two days. The idea is that the Education department of Hebei is the host. It will be a Joint Activity of Zuid-Holland and Hebei. An indication of a possible program:

1. Proposed Guest speakers

1. Xin-She Yang, National Physical Laboratory (UK London); Can we learn from Nature
2. Uhri Shafir, University of Toronto; Conceptual thinking in the digital age (Canada)
3. Chang-Hong Miao, Henan University; learning and innovation in China
4. Theo Lohman, AcadeMi-IO; Collective Intelligence on organisation, Chain and regional levels.
5. Jeroen v. Merrienboer, University of Maastricht. Developing complex learning tasks.
6. Remco van Schaik; Impact on Standards ISO TC 760 Human Resource Mgt
Chairman Martin Mulder from the Wageningen University (Competence Centre)

2. Opening ceremony of AcadeMi-IO in Hebei

1. Dutch Goals and common ambitions
2. Hebei Goals / (Department of Education)
3. Organisation structure (Chinese / Dutch)

3. Presentation / discussion of concept plans for coming year on

1. International research on innovation
2. Train the trainer program
3. International standardisation

4. Forum discussion

The investments in the *learning innovation approach* and the experiments in practice in the past 10 years is about 10 mio euro (50% paid by Industry, and 50 % by Government). After the visit of the Chinese delegation in 2011, we worked out a Dutch investment plan on innovation (4,4 mio Euro, see par 6) which is handed over to the Dutch Government, the Ministry of EL&I for the top sectors Horti-culture and Agro-food. The Chinese investment plan is not worked out yet. Like we did in the Netherland we suggest an approach to develop the plans together in a third order learning process, step by step. This is to prevent misunderstanding in expectations and to reduce unnecessary risks. The most important aspect however is that both partners grow in competence and learn from each other on the job. This will form a sustainable base for realising export projects with China. To take off, we suggest reserving a starting budget of 100.000 euro for initiating and preparing the plans for China in a workshop setting. We will work this out in more detail before August and after having visited the education burro on national level, to hear their suggestions. We suggest focusing on the three items mentioned below:

1. Definition of a common research project (30.000)
2. Definition of ISO standard on innovation and the available expertise (35.000)
3. Approach of a Sino-Dutch Train the Trainer project on innovation (35.000)

Fifty percent of the budget is to cover the Dutch costs and fifty percent to cover the Chinese costs. We will work this starting-up plan in more detail.

4. Evaluation meeting in august 2012

7 days visit; 25th of August until 1st of September 2012

4.1. Program of the Education and Innovation Delegation

Sunday 26th Sept.: Dutch Embassy

Exchange of information with officials about mission and goals of the education and innovation delegation members:

- J.P. Beers of University of Wageningen, Competence Centre
- Mixel Peters of the Free University of Brussels
- Theo Lohman of the AcadeMi-IO, Almkerk

Actions:

- a) Hand over a mission statement document on education and innovation to Mr. Franssen on the theme of a Metropolitan Food Security pilot as a possible input for his speech on Tuesday for the Hebei Government.

Monday 27th Sept.: Preparation the meeting with the officials.

1. Ran Longxiang, Director of International Cooperation of the University of Agriculture about the planned Workshop Program
2. Directors of INholland about further possible cooperation on innovation in the Netherlands.

Advices:

- a) Focus on student exchange as a number 1 priority and use innovative concepts like the 2x2 formula introduced and experienced by Inholland.
- b) Involve the deans within the Universities and organize a workshop in the Netherlands this year.
- c) Research on Innovation and standardisation is a next step to define by the deans/professors as one of the results of the seminar / workshop.

Tuesday 28th Sept. Meeting with officials of Hebei Education Department

Attendees: representatives of the education bureau and of the representatives of Universities of Hebei

Advices as a result of the informal exchange of information.

- a) Focus on student exchange on bachelor and Master level
- b) Choose for a step-by step approach like we did in the Netherlands.
- c) Explore a scalable formula by introducing an extra professional layer between the professor and the students to ensure the quality and reduce the exchange costs.
- d) Involve National Level in China like we did with the Top sectors in the Netherlands and support the connection (information exchange, names etc. to Mr. Xu Yongzan)

Wednesday 29th Sept. Preparation of the visits with Universities

AcadeMi - IO

Thursday 20th Sept. Meetings with Universities

- Shijiazhuang University of Economics on Water, school of civil engineering
Actions VUB (M. Peeters)
 - a) Create the condition for a pilot on the scalable formula
 - b) Find sister University or research institutes with programs on water
 - c) Find sister University for School of management and Science
 - d) Work out the details for the scalable formula (procedural, financial, etc)
- Hebei University of Economics and Business
Actions WUR, P.J. Beers
 - a) Explore more in-depth our mutual interests, i.e., PhD-research (WUR) and teacher professionalization (HUEB)
 - b) As a first step towards collaboration within the programme, invite HUEB for a workshop on innovation
 - c) Further steps dependent on workshop experiences
- University on Science and Technology
Actions AcadeMi-IO, T. Lohman
 - a) Prepare a workshop program for this year and invite the deans involved in the innovation program.
 - b) Send program and information about Bachelor and Master on Innovation
 - c) Involve the three Dutch HBO's in the Netherlands
 - d) Involve the University of Delft

Friday 31st Sept. Meetings in Beijing

1. Ministry of Education, People Republic of China Mr. Yang Xiaochun, Director Division of European Affairs.

Actions:

- a) Make an appointment with Mr. Fang Quinchao, Education section Chinese Embassy in Netherlands.
- b) Send Policy documents in English on top sectors Agro-food, Horti and Water.
- c) Support the connections to Province level (Hebei Education Department) to Mr. Xu Yongzan and Mr. Hou Jianguo.

2. Academy of executive coaching, Mr. Jon Echanove, representative of ECCO institute of VU-Brussels

Actions:

- a) Additional information on International Innovation Research programme and the Dutch NEN commission on standards
- b) Involve in the preparation of the workshop in Holland on the area of the learning culture in China

3. Meeting in Beijing; Embassy of the Kingdom of the Netherlands with Mr. Roderick Richter.

Actions

- a) Mr. Richter will inform David Pho, Education Representative of Holland in the Republic of China and Lucille Mercks, involved in top-sectors
- b) Top sector PR-documents will be sent in a digital form.
- c) Involve the Belgium embassy for pilot on the scalable formula

4.2. Possible initiatives and realized actions

During the mission some mid-term and short-term plans have been explored. In particular four possible initiatives are recognized:

1. A workshop is needed to find out how we can accelerate the rate of exchange of students on Master and Bachelor level (Chinese Need) with the minor Methodical Innovation as an accelerator. *We will start the preparation of this workshop in 2014.*

2: In the past, the focus was too much on Agro-culture only. The University on Agriculture is interested in an integrated approach with the University of Science and Technology. For Holland this also means more cooperation between the Technological systems (University Delft) and the WUR. *In 2013 the building of a network within the University on Delft was priority number 1 of the Chinese partners and also of the Province Zuid Holland.*

3: Learning from the experiences with complex projects in the past might give an impulse for New Competence Development and for the development of FoodParcs in one time right. The inclusion of new modular curricula for complex tasks (UM, van Merriënboer) is essential.

4. Scalable formula for education institutes might increase the span of control of exchanging students. Around this subject, our Belgium Partners at the VUB are creating Stigmergy Universities and Living Labs. The coordination in Belgium is between three research labs at the VUB; Global Brain Institute (GBI), Institute for BroadBand Technology (IBBT) and the Faculty of Education.

5. Results activities in 2013

5.1 Revival System Theory University of Delft

Cooperation with Hans Veeke and the Alumni of the Faculty 3ME of TUDelft has resulted in a Revival Program of the Delft School of System Analyse and Systems Engineering. The learning and semantics functions are integrated in the Delft Models.

A program to upscale the meta-cognitive competences on talent-innovation of the Delft Alumni starts in March 2014 with the aim to increase the cooperation of TUD with Industry and the innovation competences to handle complexity in a knowledge driven economy. The program has international attention because of its transdisciplinair character and unique novelties on integrating complexity handling, learning and reflection on four levels of learning.

The models are international validated from the theoretical point of view. The models have been tested in practice by doing applied research. The Results (evidence based) are presented to the Ministry of Economics Affairs and will be published in 2014.

REVIVAL DELFTSE SCHOOL door Harm Rozie

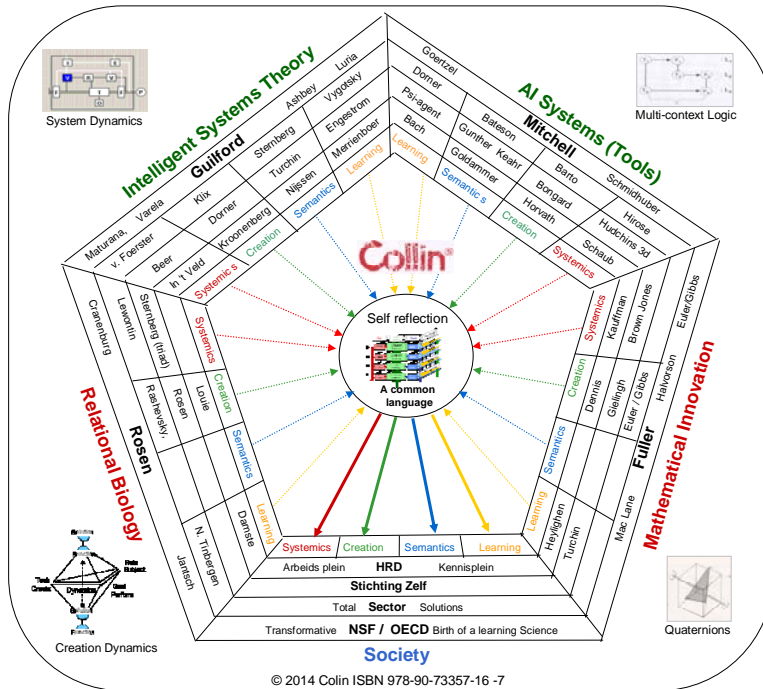
De 'Delft System Approach' (Delftse school) is al lang de stevige hoeksteen voor het begrijpen en managen van mensen in werkprocessen. Het heeft velen geïnspireerd en draagt nog altijd bij aan de optimalisatie van processen in bedrijven. De Delftse school is geëvolueerd naar een universele aanpak die bruikbaar is in elke organisatie. Privaat en publiek, groot en klein. De methode biedt ingenieurs de kans om de denk- en werkwijze van de systeembenadering veel eenvoudiger te delen met mensen uit andere kennisgebieden en met verschillende kennisniveaus.

Workshops
Het is absoluut tijd voor extra aandacht voor de kennis uit de Delftse school. Een kerngroep uit Delft en het veld, met Hans Veeke, Theo Lohman, Ronald de Roos en Harm Rozie (communicatie) gaat er zich voor inzetten. Eerste focus van de kerngroep is olievlakken onder de Alumni van DSA voor draagvlakversterking. Belangrijk instrument is een compacte kennismaking met de laatste kennis en toepassingsmogelijkheden van de benadering. In een eerste workshops op 14 en 28 maart 2014 zal hiervoor een programma op maat worden ontwikkeld om daarna breed te worden aangeboden. De kerngroep werft nu ambitieuze en gemotiveerde oud-studenten om actief bij te dragen door deelname aan deze workshops. Uiteraard is inbreng van ideeën ook welkom. De kerngroep denkt zelf al aan het digitaal ontsluiten van de oude dictaten. Blijf op de hoogte van de ontwikkelingen op Twitter via @CollinWeb.

Foto: SOURCE?

24 | In de media

5.2. International R&D network on learning and innovation



© ISBN 2014 978-90-73357-16 -7

© 2014 Colin ISBN 978-90-73357-16 -7

44



EMPOWERING THE NATION THROUGH DISCOVERY AND INNOVATION

NSF STRATEGIC PLAN FOR FISCAL YEARS (FY) 2011-2016

Transform the Frontiers		Innovate for Society		Perform as a Model Organisation	
T1	Transformative Research Methods Brainlike	I1	Useful to Society Export growth	M1	Excellence through Leadership Self Organisation
T2	STEM workforce Motivation Intrinsic Motivation	I2	Addressing Societal Challenges FoodSecurity	M2	Infuse learning on Professional Level Intrinsic Motivation
T3	International Partnership China	I3	Innovative Learning System Learn to innovate	M3	Culture of Creativity and Innovation Team-learning
T4	Research infra to support capabilities Talents Growth			M4	High level of Customer Satisfaction Co-Innovation

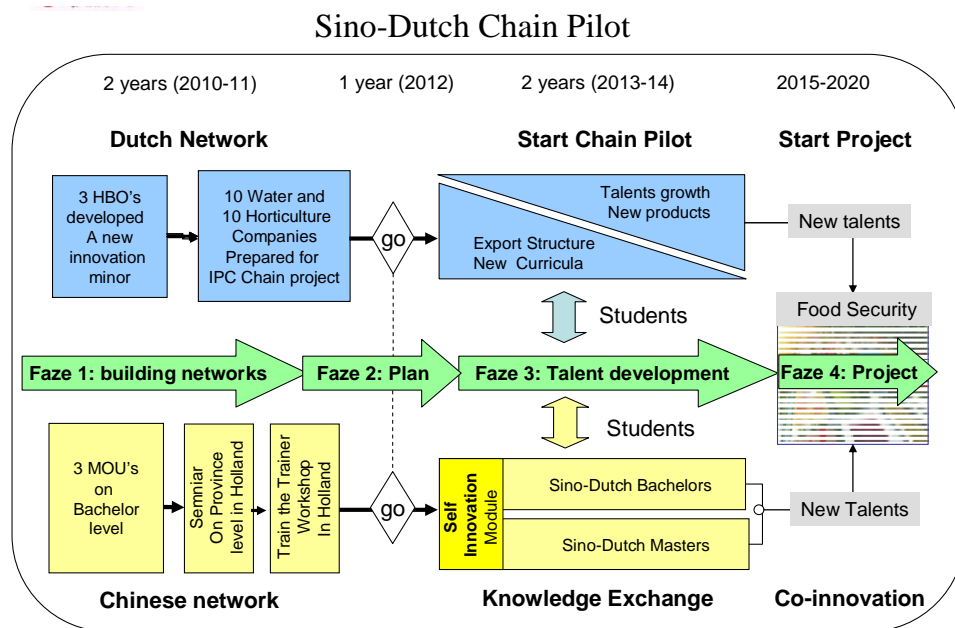
✓ High Ranking Sino-Dutch Pilot on NSF scale.

© ISBN 2014 978-90-73357-16 -7

52

5.3. Getting started the pilot with MKB and Education Fase 3.

The delay of the Sino-Dutch Chain Pilot is one year. Investments are done in mobilizing Universities (Brussel and Tudelft) and 3 Polytechnics in the Netherlands. A first meeting will be planned in march/april 2014 to prepare an operational plan with the Education Institutes.



6. Dutch Investment plan

6.1. Dutch Investment plan august 2012; Food Chain Innovation

1.

Actors	States	Total In euro's	2010	2011	2012 1 st part	2012 2 ^o part	2013	2014
1. Demand creation		600.000	150	240	100	110		
1.1. Demand creation Government		400.000	150	100	100	50		
1.2. Demand creation SME's		140.000		140				
1.3. Demand creation Provinces		60.000				60		
Finance								
Own investment		300.000	75	120	50	55		
Sponsored by RABO		200.000	75	50	50	25		
Sponsored by regional Government		100.000		70		30		
2. L to Innovate 20 SME		1.310.000				60	625	625
2.1. IPC-Plan EL&I (Plan A)		1.310.000				60	625	625
Finance								
Own investment 20 SME's		750.000					375	375
Sponsoring by EL&I IPC		560.000				60	250	250
3. L to Innovatie Schools		600.000					300	300
3.1. Demand creation VMBO-MBO		200.000					100	100
3.2. Four polytechnics Minor Mi		400.000					200	200
Finance								
Own investments		300.000					150	150
Sponsoring by EL&I top sectors		300.000					150	150
4. Innovation Research		1.4000					700	700
4.1. Fundamental R&D (plan A)		600.000					300	300
4.2. Innovation Standards (plan C)		400.000					200	200
4.3. AcadeMio-IO Transfer (plan B)		400.000					200	200
Finance								
Own investments		700.000					350	350
Sponsoring by EL&I top sectors		700.000					350	350
5. Chain management		400					200	200
5.1. AcadeMio-IO Chain management		400.000					200	200
Finance								
Own investment		200.000					100	100
Sponsoring by EL&I top sectors		200.000					100	100
Total costs		4.310.000	150	240	100	170	1825	1825
Total own investment		2.250.000	75	120	50	55	975	975
Total Sponsors		2.060.000	75	120	50	115	850	850
• Central government EL&I -IPC		560.000				60	250	250
• Central Government Top sectors		1.200.000					600	600
• Regional Government		100.000		70		30		
• Rabo Bank		200.000	75	50	50	25		

6.2. Demand Creation

The cost for demand creation is 600.000, and started in 2010 until 2012 has been sponsored for 500.000 by private sector and for 100.000 by public sector.

6.3. Budget SME with interfaces to education

IPC plan to increase SME's Innovation Ability (Topsectors)
For details see document P.4.2.3.

Total projectsum MKB is 1.310.000. Already invested is 60.000 by the Mayor of Gorcum (Piet IJssels) and the Mayor of Westland, Sjaak van der Tak for awareness Workshops.

IPC project sum per SME in euro's is 1.250.000/20 is	62.500
Support government 40% for innovation activities	25.000
1. Collective innovation Export structure (Why en What, total solution)	
1.1 Design export structure	3.000
1.2 Design specifications for curricula (with education)	<u>1.500</u>
	4.500
2. Collective innovation Organisation structure (How, production process)	
2.1. Design goals and direction	900
2.2. Design new roles	1.200
2.3. Innovate the knowledge	1.200
2.4. Seal into the organisation	<u>1.200</u>
	4.500
3. Collective innovation of the chain (How, chainproces)	
Design interfaces Horti-Agro-Education and roles in the Chains Based on the designed export structure	9.000
Collective spending is 2/3 of Government financial support	18.000
4. Individual Innovation of SME (What, technology)	
4.1. Product technology innovation with interfaces for a Total solution	4.000
4.2. Process technology innovation	1.500
4.3. Product support training for the users, sustainable	<u>1.500</u>
	6.000
Individually spending is 1/3 of Government financial support	7.000

6.4. Startbudget Education with interface to SME

The startbudget for education is 600.000, 50/50 own costs and public.

6.5. Innovation Research

This budget depends on the investments level of our Chinese Partners. Dutch industry, Education and Government have invested about 10 Mio Euro in R&D on innovation and Education. During our meetings in China with the Government and Education institutes there seemed to be an intention to support further collective research. They wanted to corporate (see letter of intent) but the ministry of education of Hebei wanted the involvement of the Dutch education partners. This is worked out in 2013. TUDelft, Inholland Nollen, Avans Kalmthout and also interested is Fontys / Han (partners in Innovation Minor).

Deelnemers IPC aanvraag uit (A&F) en (T&U)

Bedrijf	contactpersoon	@ mail adres
Merford Noise Control	Andre Hameete	andre.hameete@merford.nl
Strago Electro	Wil Gremmen	w.gremmen@strago.nl
Van Wingerden	Jan Rom Colthof	vanwingerden@wigo.nl
Reijnders	Bert Reijnders	bert@rgen.nl
Holland Marine Lifts	Emile vd Starre	est@hmlifts.com
Cor de Rover	Jan van der Pas	jan@cor-d-rover.com
Blokland Metaalbewerking	Jan Willem Blokland	jwblokland@blokland.nl
Omega	Leen Steehouwer	l.stehouwer@omegaplatforms.nl
Koppert	Paul Koppert	p.koppert@koppertmachines.nl
GreenQ	Jilles Goedknecht	jilles@greenq.nl
Bergproducts	Jeroen Gerritse	jeroengerritse@bergproduct.nl
P.L.J. Bom Groep	Martin van Zeijl	
Wilk van der Sande	Hein v.d. Sande	hein.vd.sande@wvds.nl
Logiqs Agro	Ruud Vlottes	info@leen-huisman.nl
QSolution	Willem J.Hak	Wj.hah@q-solution.nl
Sollas Holland	Rob Tuijn	rtuijn@sollas.com
Serendip-IT	Tionne de Greef	Toine.degreef@serendip-it.nl
Kiremko	Eric van Oorschot	bbe@kiremko.com