

STRENGTHENING THE DUTCH PROFILE IN ARD

A research on current and desired collaboration between the Dutch agricultural (research) sector and CGIAR, exploring possibilities for strengthening Dutch involvement in CGIAR Research Programs.

POSSIBILITIES FOR
FACILITATING CGIAR
PARTNERSHIPS

MANAGEMENT SUMMARY

The Consultative Group on International Agricultural Research (CGIAR), a global research institute undertaking agronomic research for a food-secure world, has recently undergone a reorganization in response to changing conditions in the field of Agricultural Research for Development. Through this reorganization CGIAR has changed from being based on separate centers towards a programmatic network organization with its research organized under CGIAR Research Programs (CRPs). This shift toward functioning as a network organization encompasses among others a stronger focus on conducting research in partnerships.

The Netherlands may be considered among the top global players regarding both agricultural production and agricultural research. The Dutch agricultural (research) sector and CGIAR possess complimentary expertise and interests in many areas and may potentially complement each other on many of the CRPs. In particular in areas outside the core expertise of CGIAR, there is significant scope for added value of cooperation. With a total annual contribution of around USD 41,4 million through the Ministry of Foreign Affairs, the Dutch moreover contribute significantly toward the goals of CGIAR.

Dutch knowledge and expertise however, are to date insufficiently involved in CGIAR research programs. The research conducted for the report at hand explores opportunities to strengthen the Dutch profile as a strategic partner in Agricultural Research for Development. In doing so, respondents from several stakeholders from the Dutch agricultural sector have been interviewed regarding their experience with collaboration with CGIAR. Several Dutch staff members working on various functions and levels within the CGIAR system were interviewed about among others their view on CGIAR functioning specifically regarding collaboration with external parties. Several CGIAR Fund Council members have been interviewed about their CGIAR funding strategies and the advantages and disadvantages these funding strategies encompass for collaboration with national stakeholders. Policy officers from among others the Ministry of Foreign Affairs and the Ministry of Economic Affairs have been interviewed about instruments touching upon the subject of ARD which may be aligned to strengthen the Dutch profile for CGIAR collaboration. Finally, a discussion among stakeholders on possibilities for strengthening the Dutch profile was organized. The data generated was synthesized into the report at hand.

A thorough assessment of collaboration between CGIAR and Dutch parties has led to the surfacing of various forms of collaboration. Albeit being criticized, among others, for being too introverted, CGIAR thus appears to be prepared and willing to collaborate with external parties. To date however, most of this collaboration was found to be informal, on individual projects and on an ad hoc basis. When cooperation is being funded by CGIAR, these partnerships moreover are often based on one-sided dependence.

Through intensified collaboration with CGIAR, insight into the long term strategic research agenda of CGIAR may be increased. Fruitful collaboration may be expected to

facilitate the buildup of mutual trust and common working methods, diminished transaction costs, the development of networks between the parties involved, and an increased insight into each other's field of expertise. Such partnerships may thus function as a catalyst fueling even more, and more effective, collaboration. Parties possessing a sufficiently large budget, a large scope for complementarity, and a long-term scope, are advised to opt for collaboration on a CRP level so that they may strengthen their role in CRP governance and management and exhibit influence on the direction of CGIAR's research agenda. In other instances, most fruitful collaboration appears to be on a project basis.

In a CGIAR system that appears to slowly be opening up and involving external parties in its research, it is paramount for Dutch parties to ensure that they are getting, and staying, involved in CGIAR partnerships. To facilitate both current and future successful and effective cooperation, stakeholders and government need to join forces to broaden the scope for involvement in CGIAR research of Dutch knowledge institutions, research institutes, civil society organizations, and businesses alike. Dutch stakeholders need to continuously be proactive in approaching CGIAR, in actively seeking and highlighting complementarities, and in building and maintaining a network within CGIAR. The Dutch government should align its policy instruments to alleviate the main barriers and constraints identified in CGIAR collaboration. Strategies for doing so are described in the report at hand.

OVERVIEW OF ABBREVIATIONS

A4NH	Agriculture for Improved Nutrition and Health (CGIAR CRP)
ARD	Agricultural Research for Development
ARI	Advanced Research Institute
BoP	Base of the Pyramid
CCAFS	Climate Change, Agriculture and Food Security (CGIAR CRP)
CGIAR	Consultative Group on International Agricultural Research
CGN	Centre for Genetic Resources (WUR)
CIAT	International Center for Tropical Agriculture (CGIAR)
CIFOR	Center for International Forestry Research (CGIAR)
CIMMYT	International Maize and Wheat Improvement Center (CGIAR)
CIP	International Potato Center (CGIAR)
CIRAD	French Agricultural Research Centre for International Development
CRP	CGIAR Research Program
CSA	Climate Smart Agriculture
CSA	Centre for Crop Systems Analysis (WUR)
DAK	Department of 'Agrokennis' (agricultural knowledge) (Ministry of Economic Affairs)
DDE	Sustainable Economic Development Department (Ministry of Foreign Affairs)
DLO	Dienst Landbouwkundig Onderzoek (WUR)
DME	Environment, Water, Climate and Energy Department (Ministry of Foreign Affairs)
EC	European Commission
EIARD	European Initiative for Agricultural Research for Development
EL&I	Currently: Ministry of Economic Affairs, Agriculture & Innovation
FARA	Forum for Agricultural Research in Africa
G4AW	Geodata for Agriculture and Water
GRA	Global Research Alliance
GRISP	Global Rice Science Partnership (CGIAR CRP)
ICRAF	World Agroforestry Centre (CGIAR)
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics (CGIAR)
IDRC	International Development Research Centre
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute (CGIAR)
IITA	International Institute of Tropical Agriculture (CGIAR)
ILRI	International Livestock Research Institute (CGIAR)
IPG	International Public Good
ISPC	Independent Science and Partnership Council
IRRI	International Rice Research Institute (CGIAR)
ITC	Faculty of Geo-Information Science and Earth Observation (Twente University)
IWMI	International Water Management Institute (CGIAR)
JPO	Junior Professional Officer
KIT	Royal Institute of the Tropics
LDCs	Least Developed Countries
MJSP	Multi-annual Strategic Plan
MoU	Memorandum of Understanding
NARs	Natural Agricultural Research Systems
NGO	Non-Governmental Organization
NRS	Natural Resources (ITC)
NUFFIC	Netherlands Organization for Cooperation in Higher Education
NWO	The Netherlands Organization for Scientific Research
ODA	Official Development Assistance
PPPs	Public-Private Partnerships

SNV	The Netherlands Development Organization
WOTRO	Science for Global Development
WUR	Wageningen University & Research
DFID	Department for International Development (UK)
CSO	Civil Society Organization

Table of Contents

Management Summary	I
Overview of abbreviations.....	III
Introduction.....	1
Central Research Question	2
Methodology	3
The role of CGIAR in a changing system	4
Collaborating with CGIAR	6
Current cooperation with Dutch parties	8
Content-based exchanges	8
Hiring Dutch expertise	9
Master students, PhDs and postdocs	9
Jointly formulated projects.....	10
Collaboration funded by third parties	10
Collaboration with CSOs	12
Collaboration with the Dutch private sector	13
Collaboration on CRPs	13
Establishment of partnerships.....	15
Personal networks	15
Proactivity of Dutch parties	15
Visibility of research and expertise.....	16
Complementarity.....	16
General problems in CGIAR collaboration	17
CGIAR funding.....	17
CGIAR's financial planning system.....	17
Diverging working methods.....	18
Lack of transparency.....	18
Collaboration overall	19
Possibilities for improving the Dutch position.....	21
Smart CGIAR funding	22
Dutch funding strategy	22
Funding of other donors.....	24
Tying CGIAR funding	27

Funding in kind	28
Seed money/ matching money.....	28
Staff involvement.....	29
Associate Experts Programme	30
Staff exchange	31
Stronger policy alignment.....	33
DLO	33
NWO-WOTRO	33
Global Research Alliance	34
Leveraging the private sector	34
Top Sectors	36
The role of Dutch embassies	36
Networking days	37
Conclusion and recommendations	38
Annexes	40
Annex I: Overview of CRPs and Dutch CRP funding.....	40
Annex II: Overview of Dutch in CGIAR	41

INTRODUCTION

The Consultative Group on International Agricultural Research (CGIAR) is a global research institute undertaking agronomic research for a food-secure world. It states its vision as *“to reduce poverty and hunger, improve human health and nutrition, and enhance ecosystem resilience through high-quality international agricultural research, partnership and leadership”*. For 40 years already, the organization is having a good reputation, and CGIAR was among others a central player in the ‘Green Revolution’. Donor confidence in the ability of CGIAR to address global challenges in the areas of food security and the development of agricultural innovations is being reflected by a steady growth of financial support for the organization. With a funding totaling \$ 1 billion in 2013, CGIAR constitutes the largest global player in agricultural research and development with a specific focus on poverty reduction.

CGIAR consists of a network of 15 specialist centers with each their own thematic- or crop orientation. In a recent reorganization, these centers have been united under the CGIAR consortium. The reorganization has moreover created a matrix structure for CGIAR, with a system of 15 CGIAR Research Programs (CRPs) with a duration of 3 years overlapping the centers. Within each of these CRPs, one or more of the CGIAR centers has the lead and ought to cooperate with other centers and external parties. One of the core principles of CGIAR’s Strategy and Results Framework, and for that reason one of the core criteria for all CRPs, is that all research programs need to be executed within the right partnerships. This criterion for partnerships encompasses the active involvement of target groups and other stakeholders, particularly farmer organizations and local development organizations, but also national and regional research institutes, knowledge institutions, civil society organizations and the private sector.

The Netherlands may be considered a top global player regarding the production and processing of food. The Dutch sectors of Agri-food and Horticulture and propagation materials are among the world’s best and have been included in the Top Sector Policy of Cabinet Rutte I in 2010. Various Dutch knowledge institutions and research institutes contribute in innovative ways toward knowledge on agriculture and are well equipped to contribute to CRPs through partnering with CGIAR. It is moreover in the interest of CGIAR to keep ARIs committed. More intensive partnerships can potentially provide benefits for both the CGIAR and the Dutch agricultural research and innovation sector. Such intensified collaboration fits well within Dutch policy to better leverage Dutch expertise and competence in development assistance. Because of Dutch experience in operating within the Dutch Diamond, collaborating with CGIAR moreover provides opportunities for increased involvement of the private sector.

With a total annual contribution of around USD 41,4 million through the Ministry of Foreign Affairs, the Dutch contribute significantly toward the goals of CGIAR. Dutch knowledge and expertise however, are to date insufficiently involved in CGIAR research programs. The Dutch Ministries of Foreign Affairs and Economic Affairs therefore aim to explore opportunities to strengthen the Dutch profile as a strategic partner in

Agricultural Research for Development. The research at hand provides an inventory and evaluation of current collaboration, and creates insight into possibilities for creating synergy in policy and funding to increase the impact of national programs in the field of food security and to facilitate strategic collaboration with CGIAR on themes that are relevant for the Netherlands.

CENTRAL RESEARCH QUESTION

In aiming to create insight into means for facilitating Dutch involvement in CGIAR research, the research in the report at hand will answer the following research question:

IN WHICH WAY CAN THE DUTCH PROFILE AS A STRATEGIC PARTNER IN CGIAR AGRICULTURAL RESEARCH FOR DEVELOPMENT BE STRENGTHENED?

In doing so, the report first provides an elaboration on the functioning of CGIAR in a changing system. Added value of collaboration between CGIAR and Dutch parties is thereafter being described. Next, a description is provided of the various forms of current collaboration between CGIAR (centers) and Dutch parties, including some insightful examples through which advantages and disadvantages of these forms of collaboration become clear. Problems in collaborating with CGIAR are brought to the fore, and based on an analysis of how current collaborations have been established, how collaboration is being facilitated by other CGIAR donors, and how problems occurring in collaboration may be avoided, several strategies for improving the Dutch position for CGIAR collaboration are being described and evaluated. These possible strategies include tying Dutch CGIAR funding to preconditions regarding collaboration with Dutch parties and other funding strategies potentially facilitating collaboration. Moreover, several strategies to facilitate the buildup of a network within CGIAR and opportunities for a stronger alignment of Dutch policy are being elaborated upon.

METHODOLOGY

For the research at hand, several respondents from various Dutch stakeholders in ARD have been interviewed about current collaboration between their organization, institute, or institution and CGIAR and about advantages and disadvantages these forms of collaboration encompass. Respondents were moreover asked about their ideas on how constraints regarding the establishment and effective functioning of such collaboration might be removed. Moreover, several Dutch staff members working on various functions and levels within the CGIAR system were interviewed about among others their view on CGIAR functioning specifically regarding collaboration with external parties. Again, these respondents were moreover asked how cooperation between Dutch parties and CGIAR may be facilitated.

Several CGIAR Fund Council members were interviewed about their CGIAR funding strategies and the advantages and disadvantages these funding strategies encompass for collaboration with national stakeholders. Based on the ensuing inventory of current and desired collaboration, advantages and disadvantages of such collaboration, and an initial list of suggestions for facilitating the establishment of fruitful partnerships between Dutch parties and CGIAR, policy officers from among others the Ministry of Foreign Affairs and the Ministry of Economic Affairs have been interviewed about the feasibility of aligning instruments identified and possible other instruments touching upon the subject of ARD which may be aligned to strengthen the Dutch profile for CGIAR collaboration. The results of all these interviews have been synthesized in a presentation, on the basis of which a discussion with various Dutch stakeholders regarding collaboration with CGIAR was organized. All interviews conducted and the output from the discussion form the input for the final report at hand.

THE ROLE OF CGIAR IN A CHANGING SYSTEM

In today's field of Agricultural Research for Development (ARD), National Agricultural Research Systems (NARs) and Advanced Research Institutes (ARIs) are growing in their professionalism and the clout of private sector organizations in agriculture for development is increasing. Within Africa, NARs have moreover joint forces in the Forum for Agricultural Research in Africa (FARA). Whereas the CGIAR has a worldwide scope, and currently still functions as an expert center relating to several areas of ARD, the changing system around the organization led to an increasingly strong call for the CGIAR to change her approach.

Facing this changing context, CGIAR has undergone a process of reinvention and changed its organization from being based on separate centers towards a programmatic network organization with its research organized under CGIAR Research Programs (CRPs). These CRPs led to a shift in focus on international challenges and a stronger design for impact. This programmatic network is moreover intended to facilitate collaboration not only between the separate CGIAR centers but between CGIAR centers and outside stakeholders, national and regional research institutes, academic institutions, civil society organizations, and the private sector. By overcoming boundaries between potential partners and merging its contacts in its CRPs, CGIAR could play a key role in creating synergy between separate agricultural systems.

There is however still plenty of room for improvement in CGIAR's potential role as a network organization, in which it should put a larger focus on coordinating, instead of executing, ARD programs. Instead, CGIAR centers appear to be protectionist, attempting to retain their individual legitimacy and independence by investing in their own institutes rather than in collaborative ventures with other centers and potential outside partners. There moreover appears to be a lot of old inertia and bureaucracy still present in the system, with a persistent focus on existing contacts and action areas at the expense of the program approach.

Some suspect a political game going on among the separate centers in which they attempt to secure as much CRP funding and responsibility as possible within their own center. Instead of developing formal partnerships with parties that possess complimentary expertise, centers frequently seem to prefer to internalize this expertise by hiring the respective individuals, thereby increasing their staff base but degrading their functioning as a network organization. This tendency seems to be strengthened by the way the CGIAR system is currently organized, demanding from the separate centers that they secure a substantive part of their funding themselves, incentivizing them to keep their institutional funding within their own system as much as possible.

The reorganization has moreover contributed towards CGIAR's so-called meeting culture, leading to inefficient use of resources and a diminished expediency both within CGIAR herself and within partnerships in which CGIAR is involved. Although a transition of the extent that CGIAR went through, encompassing a completely new way of working, undoubtedly leads to more initial meetings, it shows the extent of difficulty for

both CGIAR as a whole and the separate centers to move towards functioning as a network organization. Strong leadership and the right incentives in the system are necessary to consolidate the reorganization and to capitalize on its potential advantages. More coherence and transparency in its research framework and more clarity about how action areas are funded moreover seem desirable.

COLLABORATING WITH CGIAR

Despite having little land, the Netherlands is the world's second largest food exporter and as the largest economic sector of the country, the Agro & Food sector contributes towards almost 10% of the Dutch economy and employment. Some of the most successful and innovative businesses in agriculture are Dutch, and among others Wageningen University & Research (WUR), the Royal Institute of the Tropics (KIT), and Twente University's Faculty of Geo-Information Science and Earth Observation (ITC) are internationally renowned institutes in the field of agricultural research, with WUR recently being awarded best agriculture university in the world. Moreover, the Netherlands is at the European top considering private investments in agriculture. Within the country there is significant and continually growing experience with public-private partnerships (PPPs) and operating and innovating within the so-called 'golden triangle' or 'Dutch diamond', encompassing solid exchange between agricultural research and education, business, and government.

For the Netherlands, besides very banal reasons of CGIAR collaboration contributing toward employment opportunities, collaborating with CGIAR is desirable because the Dutch agricultural sector may benefit from the extensive expertise residing in the CGIAR. Moreover, especially in the current era of globalization, it is necessary for the Netherlands to remain active in prominent ARD networks to ensure a prominent place or even inclusion in such networks in the future.

The Dutch agricultural sector and CGIAR then, possess complimentary knowledge and interests in many areas and may potentially complement each other on many of the CRPs. Both parties possess a large network that may be leveraged to benefit the jointly undertaken research. CGIAR's many contacts with local research institutes for instance, could prove to be very useful when the parties jointly respond to calls for research. Collaboration may moreover function as an amplifier for attracting new projects and/ or funding.

CGIAR has excellent research facilities and infrastructure, also in places where in general this is very limited. The organization is moreover being recognized for its excellent researchers and its focus on exploratory and innovative research. CGIAR disposes of excellent experimental fields and a huge database containing useful data for modeling research and impact assessment, which may be very interesting for Dutch parties. The fact that many CGIAR centers have a presence on the ground and are therefore near to current issues and well aware of local situations, and moreover have a local network within both governments and NGOS, is being recognized as constituting a significant advantage in cooperation. CGIAR's strong problem orientation is moreover being recognized as providing added value for cooperation.

The sharing of knowledge is part of the mandate of Dutch knowledge institutions, and CGIAR collaboration increases the relevance of the research that is carried out. Moreover, through cooperation Dutch partners may strengthen their field presence and their network within CGIAR, facilitating the emergence of ensuing collaborative

initiatives. Partnering with CGIAR may provide a means for Dutch knowledge institutions to finance postdoc and PhD students, the model of which can provide an example for many other countries. By training PhDs and Postdocs from the South, Dutch knowledge institutions moreover contribute towards capacity building in Least Developed Countries (LDCs). Finally, strategic collaboration with CGIAR offers possibilities for a formulating a (more coherent) long term research agenda.

The Dutch knowledge institutions, NGOs, and private sector on the other hand possess a wealth of knowledge and broad expertise which may be very useful for CGIAR. The strength of the Dutch agricultural sector is recognized by many respondents to be in low volume, high value crops (vegetables, micronutrients and refinement) and in roots and tubers. Moreover, the Dutch are very good in integrating systems and delivering system solutions. Another recognized strength is Climate Smart Agriculture (CSA).

With their high corporate and accountability standards, Dutch organizations have a good reputation in both the area of agriculture and professional collaboration. In some areas, Dutch parties have already invented the wheel, which may thus provide quick wins for CRPs. By collaborating with Dutch knowledge institutions and NGOs, CGIAR may moreover extend her network among the Dutch private sector and among the private sector on the ground in LDCs. WUR's Dienst Landbouwkundig Onderzoek (DLO) for example, is active in much collaboration with actors from the private sector in LDCs, in which finance is usually provided by these private sector parties. The increasing experience of the Netherlands with collaborating within PPPs and the Dutch Diamond may moreover be incorporated as a component in collaboration benefiting CGIAR research.

From a more practical point of view, the Netherlands has a favorable location, central for uniting people from different parts of the world, compact enough for time-efficient domestic travel, and with Schiphol as an excellent hub that many people often pass through anyway on their international travel.

CURRENT COOPERATION WITH DUTCH PARTIES

That the Netherlands has more to offer to CGIAR than merely budgetary support thus seems obvious; within Dutch knowledge and research institutions, NGOs, and the Dutch private sector a lot of agricultural knowledge and expertise is residing that may be leveraged to advance CGIAR's goals. Clearly, collaboration between CGIAR and the Dutch agricultural sector seems desirable.

Interviews with various stakeholders within the Netherlands led to the surfacing of diverse types of collaboration among Dutch parties and CGIAR. There is a difference in preference for and appreciation of these various forms of collaboration among the interviewed parties, and as to yet there does not appear to be a consensus about which would be the optimal form of collaborating with CGIAR. Whereas some researchers are happy to be subcontracted on a project basis, others desire to be involved in formulating the research agenda.

For the research at hand an inventory was made of actual and desired forms of cooperation. Below, the different forms of collaboration identified, and the advantages and disadvantages these forms of collaboration encompass for parties involved, will be elaborated upon. Based on this inventory, optimal forms of cooperation expected to provide the most advantages for all parties involved and, most importantly, for the ultimately targeted beneficiaries, are described.

CONTENT-BASED EXCHANGES

Whenever collaborative initiatives have straightforward goals and a clear correspondence in goals and vision among parties involved, transaction costs of such collaboration can be kept low, facilitating collaboration in the form of content-based exchanges. Because of her reputation and broad experience and expertise in the field of ARD, WUR constitutes a logical partner for various CGIAR centers. Indeed, there are various content-based exchanges between WUR and diverse CGIAR centers. An example of such exchanges is the frequent collaboration between the WUR Centre for Genetic Resources (CGN) and Bioversity International, which is based both on content and on policy formulation. Twente University's ITC faculty then, supports several CGIAR centers including amongst others AfricaRice with its data systems. ITC's department of Water Resources moreover frequently exchanges knowledge and insights with CGIAR when they meet each other at congresses or in the field.

HIRING DUTCH EXPERTISE

Some researchers and departments are said to reside in a consultant mode, in which they prefer to be subcontracted and paid for the work carried out or the hours invested into a project. Indeed in some instances, but momentarily still on a small scale, Dutch expertise is being hired on a contract base to contribute to CGIAR projects. An example of this is the collaboration between WUR's department of Farming Systems Ecology and IFPRI, in which WUR is being paid on a subcontract basis. ITC's NRS has been hired by IRRI to contribute toward CGIAR's GRiSP CRP (CRP 3.3). ITC's remote sensing expertise has moreover been hired on a contract basis by ILRI for a micro-insurance project in Kenya. FutureWater, a party from the Dutch private sector, was contracted to conduct an evaluation on the added value of high-resolution satellite imagery for the CCAFS CRP (CRP 7).

In these instances, Dutch involvement takes on the form of executor of research or provider of necessary expertise and Dutch partners do not contribute towards the formulation of the project. Albeit generating revenue for Dutch partners, such a strong focus on financial compensation was said to be undermining the joint interest in creating impact, while creating such impact is the main interest of CGIAR. Moreover, because of the financing structure of Dutch knowledge institutions, hiring Dutch researchers as consultants while there are cheaper alternatives available is often not preferred by CGIAR. When Dutch parties are being subcontracted, there are often little or no possibilities for them to contribute substantially towards the design of the research program. Collaboration on subcontracting basis is moreover often considered to be too ad hoc, taking place on an opportunistic base, and hardly delivering any long-term strategic advantages for either of the parties involved.

MASTER STUDENTS, PHDs AND POSTDOCS

A type of collaboration that was frequently mentioned by various WUR researchers is the exchange of or joint appointment of PhDs. Moreover, in various instances CGIAR takes up the role of supervisor of MSc graduates; e.g. the CGIAR supervision of MSc graduates from WUR's Plant Production Systems Group. Albeit still on a piecemeal basis, ITC also indicated to collaborate with CGIAR through the appointment of PhDs; IWMI currently finances a PhD student at ITC's department of Water Resources and another PhD at ITC's Natural Resources Department (NRS) has been jointly financed by CGIAR's GRiSP CRP (CRP 3.3) and Erasmus Mundus.

So-called sandwich PhDs and postdocs may greatly contribute towards capacity building, and the Dutch PhD model may serve as an example for other countries. Going beyond capacity building, through PhDs and postdocs Dutch knowledge institutions can deliver robust, high quality research. Moreover, international exchanges and a large alumni network provide great networking opportunities, enhancing the export value of Dutch expertise. The exchange or joint appointment of students may thus potentially lead to longer-term collaborative spinoffs, although ITC indicated that for them as to yet this has not been the case.

JOINTLY FORMULATED PROJECTS

Many researchers interviewed indicated to be mainly interested in a collaboration involving the joint identification and formulation of projects and the joint submission of proposals for funding on subjects where complementarities among the parties exist. Dutch partners may then incorporate their network among the Dutch private sector, whereas the CGIAR could take up the role of a matchmaking partner to secure funding from other research institutes. Collaborating with CGIAR on a project level may then provide a means through which to secure funding for PhDs and postdocs.

Exemplifying the prevailing preference among researchers for this form of collaboration is the description of one of the researchers of what he considers to be an optimal form of cooperation with CGIAR's CIFOR. He claims that currently, CIFOR often taps into knowledge and expertise residing within his department, but rarely or hardly offers financial compensation for doing so. An ideal form of cooperation would steer clear of such one-sided dependence and would instead involve a more lasting, constructive, and equal partnership. In this partnership then, when generating ideas by tapping into each other's expertise, joint projects involving substantial funding are formulated and both parties involved deliver a substantial input of staff effort. The projects formulated should subsequently be financed jointly or with funding from a third party such as NWO-WOTRO, the Bill & Melinda Gates Foundation, or Horizon 2020. In any case, in such a partnership attracting funding would be a shared responsibility. When successful, this would lead to an institutionalization of the partnership and eventually, an integration of this approach into the CGIAR system. Project possibilities may be the 50/50 appointment of a postdoc, to bring in a CIFOR staff member as extraordinary professor at his department, or jointly formulating a coherent research program involving 8 PhDs and some postdocs. When proximity of the projects to one of the CRPs can be ensured, CGIAR may sometimes provide additional finance from its CRP budgets.

However, such jointly formulated projects of Dutch parties and CGIAR centers only seem to occur incidentally and most parties interviewed do not see approaching CGIAR with an idea for research as a very viable option. Those instances that do encompass full collaboration are generally funded by third parties or by private funding. When the collaborative initiative is fully financed by CGIAR, in most cases there is no room for other parties to substantively contribute towards the formulation and/or design of the project. Indeed, CGIAR's WorldFish indicated that collaboration between their center and Dutch parties is momentarily very ad hoc and can only be sought when there is sufficient funding available, which is not always the case, or when staff exchanges are possible. This ad hoc collaboration often takes place on an opportunistic base and hardly delivers long-term strategic advantages for either of the parties.

COLLABORATION FUNDED BY THIRD PARTIES

It thus seems that the most viable attempts to collaboration with CGIAR in which there is a substantive role in program design for the other party, are those initiatives that already have funding available, or encompass a joint responding to calls. This is most likely related to the observed tendency of CGIAR centers to keep their budget within

their own organization, and to use collaboration through partnerships amongst others as a means for attracting additional finance. Indeed, even for the parties that know the most collaboration with CGIAR centers, the bulk of these collaborative initiatives is financed with own means, or with means they themselves or the two parties jointly attracted, e.g. from NWO-WOTRO grants. Such a joint response to calls for research thus was pinpointed as the best way to establish the desired form of cooperation on a project basis.

In some cases, WUR collaborates with varying CGIAR centers in projects including other partners and funded by a third donor. WUR's CGN for example, collaborates with amongst others CGIAR's International Potato Center (CIP) in the new Seed Grow Program of Oxfam Novib. As one of the parties within a trust of a CRP relating to the conservation of collections, CGN moreover contributes to evaluations of ongoing CGIAR efforts related to conservation efforts. In2Africa is another such project, including both WUR's Plant Production Systems Group and CGIAR's IITA as partners. This extensive project is funded by the Bill & Melinda Gates Foundation with a WUR professor as the grantee.

Currently there exists a bilateral collaboration in Tanzania and Benin based on a larger WOTRO program including, amongst others, WUR's Centre for Crop Systems Analysis (CSA) and AfricaRice. This collaboration is funded almost entirely by NWO-WOTRO and only includes marginal CGIAR financial contributions, specifically from its CCAFS CRP. It has been jointly formulated in response to a NWO-WOTRO call and encompasses 3 PhD's and one Postdoc of WUR. There are moreover some EU projects in the pipeline which are jointly developed with CGIAR centers, but which are generally funded by WUR. WUR's Farming Systems Ecology Group is in an ongoing collaboration with CIMMYT encompassing three PhD's which are financed by WUR. In compensation, CGIAR is paying for a Postdoc in the Farming Systems Ecology Group. Based on a workshop in November 2013, ITC joined in a consortium with amongst others CIMMYT and ICRISAT and jointly formulated a large project which they subsequently filed for 100% funding by the Bill & Melinda Gates Foundation.

Sometimes however, there appears to be competition on grants between Dutch knowledge institutions and research institutes, and CGIAR. This problem is especially salient for WUR's DLO institutes, KIT, and SOW-VU, because these institutes are more sensitive to funding than knowledge institutions. Whereas Dutch knowledge institutions receive core funding from the Ministry of Education, Culture & Science (OC&W), research institutes get by on 100% project finance and have to charge full costs, limiting the informal emergence of collaborative initiatives. There is not necessarily a lack of collaboration between these institutes and CGIAR, but current cooperation is considered to be too ad hoc. These research institutes are thus being disadvantaged in their opportunities to collaborate with external organizations such as CGIAR, as compared to faculties, leading them to voice concerns about the lack of a level playing field not only internationally, but also in the Netherlands. The discussion on how

knowledge institutions and research institutions should be financed and mandated however, lies outside the scope of the report at hand.

COLLABORATION WITH CSOS

CGIAR appears to display a preference for collaborating with local partners. Partly as a response to outside pressure, CGIAR has started to recognize the added value of Civil Society Organizations' (CSO) led ARD to food, nutrition, and livelihood security among smallholder farmers, and has started to seek partnerships with these CSOs. The more established Dutch NGOs then, appear to be more attractive partners for CGIAR. Collaborating with CGIAR centers sometimes provides opportunities for NGOs to tap into large CGIAR funds, such as when SNV was invited by ICRAF to be the lead implementing agency on a project for enhancing food & water security for rural economic development.

Whereas Dutch knowledge institutions and CGIAR are operating in the same market niche and might hence be found competing each other, limiting collaboration opportunities, Dutch NGOs can translate research findings to development practice and distribute innovations from CGIAR to beneficiaries. This complementarity between the organizations leads to a natural form of partnership. Because the organizations are not competing each other, contractual transaction costs of the collaboration can be kept relatively low and collaboration is very straightforward and natural. Moreover, the field presence of NGOs and the physical proximity of these NGOs to CGIAR centers is said to be strongly contributing towards fruitful collaboration.

SNV for example is regularly approached for collaboration by several CGIAR centers recognizing the need for a strong development partner to assist in execution of the projects. Whereas in the past this collaboration mainly took place on an ad hoc, project-to-project basis, their collaborative efforts have recently expanded toward a more strategic level, based on agreements among headquarters. Recently in increasing occurrences, SNV is responding to calls and is inviting CGIAR centers to join. Moreover, in more and more instances SNV and CGIAR institutes jointly respond to calls, where SNV is approached to be involved from the beginning, already providing guidance in the proposal writing stage.

Specifically, SNV indicated that there has been significant collaboration between 15 different SNV country offices and 10 out of the 15 CGIAR centers. Centers with which SNV collaborates most are ICRAF and ILRI, with which they have MoUs. Next to these centers, SNV is about to sign MoUs with CIAT, IITA, AfricaRice and IFPRI. A concrete example of a very fruitful collaboration is the partnership between SNV, ICRISAT, ICRAF and CCAFs, in which they undertake joint bidding for opportunities in the Sahelian countries based on a DFID call for building resilience. Most of the collaborative efforts between SNV and CGIAR could be easily extended if more resources were to be available.

Another example of CGIAR-NGO collaboration is IWMI joining hands with Unesco-IHE to launch the website wateraccounting.org, and agreeing on a new MoU for ensuing

collaboration. ETC, specifically through its Prolinnova International Network, collaborates with several CGIAR centers on several levels. Still, it appears that only a small percentage of CGIAR staff is seeking such partnerships on a fair and equal basis.

COLLABORATION WITH THE DUTCH PRIVATE SECTOR

Currently there is very little collaboration among the Dutch private sector and CGIAR, and no examples could be found of instances in which a Dutch private party was substantively involved in a CGIAR partnership beyond a subcontract basis. Moreover, as to this moment there does not appear to be a significant interest of the private sector to move beyond this form of cooperation or to pump additional funding into CGIAR partnerships. In an era in which the Dutch private sector is being increasingly involved in development aid, there thus may be opportunities for DGIS to more strongly involve the Dutch private sector in CGIAR partnership initiatives.

COLLABORATION ON CRPs

Collaborating on a thematic level within the CRPs, sharing responsibility on a CRP level, may be said to be the most abstract and strategic level of collaboration between Dutch parties and CGIAR. Most stakeholders seem to agree that the role of partners in CRP governance and management should be strengthened. In CRP involvement then, explicit roles in leadership for partners, i.e. of work packages, and resource allocation of a small number of strategic partners, is strongly preferred over generic statements regarding very large numbers of partners. Moreover, there is consensus over that partnerships should be enlarged beyond research partners, i.e. development partners such as NGOs, advisory services, the private sector, etc. should be included, and that partners need to be engaged more explicitly in particular at the proposal stage.

CRPs are very broad however, and many potential partners do not know how to find and realize affiliation with these. Indeed, there are only few examples of such a strategic level of collaboration involving Dutch parties. Only WUR was found to be involved as a partner in some CRPs, contributing its expertise on system analysis to CGIAR System CRPs 1.1 and 1.2. There were moreover several roundtable meetings to explore scope for collaboration between WUR and CGIAR on the Livestock and Fish CRP (CRP 3.7).

However, CRPs are very much focused on structure, causing cooperation on such a thematic level to lead to a lot of deliberation about planning, roles and responsibilities. During such meetings it appears to be difficult to come to the point, and a concrete program often seems to be lacking. Moreover frustrating collaboration on a CRP level are the financial restrictions present in the CGIAR system. As mentioned before, there appear to be incentives present in the CGIAR system which cause the separate CGIAR centers' tendency to keep their budget within their own system. Thus far, because of the novelty and complexity of the CRP system, a clear financial framework for partnerships on CRP levels seems to be lacking. CRP funding was moreover said to be much smaller than project funding and involving many more partners. Because budgets are made available in annual cycles, merely short programs can be implemented.

Collaboration on a thematic level then, leads to the availability of a limited budget with many restrictions. This limited budget is moreover mostly spent on transaction costs incurred by the frequent meetings and staff time involved in adjusting to different styles of working. Complaints were voiced that during such meetings huge ambitions are set forth which often do not seem to encompass very realistic targets, resulting in little effective action. Finally, transaction costs are further increased and effectiveness of partners is further limited by the demands CGIAR places on its partners regarding measuring and reporting of results and impact.

Difficulties in this form of cooperation and the fact that as mentioned before, thus far involvement on CRP level did not lead to many concrete results worth mentioning is thus causing frustration among parties involved, with researchers involved indicating that such collaboration on a thematic level may not be the most efficient use of limited time and resources. Some parties therefore consciously opt out of collaborating on a CRP level; using SNV as an example again, they have been approached to be a flagship organization on a CCAFS call, but after decided after consideration that this form of collaboration did not make good business sense.

However, albeit often there is no obvious, direct match between Dutch expertise and CRPs, and albeit the occurrence of other problems as described above, from a long-term perspective collaboration on a higher level of abstraction such as on CRPs would still be desirable. Collaborating on a CRP level offers opportunities to influence the direction of CGIAR on a higher level. For some Dutch parties which have sufficient budget and a long-term scope, it may thus be advisable to target consistent collaboration on a number of selected CRPs. In time, due to the buildup of trust and common working methods, transaction costs involved with initiating collaboration on such a level of abstraction are expected to diminish.

ESTABLISHMENT OF PARTNERSHIPS

Within programs where CGIAR is not a world leader, to achieve a high level of excellence partnerships are particularly important. Although several CGIAR centers indicated to be open for different, new relationships and partnerships, they also admit to be lacking a clear and complete overview of potential Dutch partners, the possible complementarities with those partners, and how these potential partners should be best approached. Because of this, they often end up using the same tried and tested methods and ensue collaboration with existing partners. Moreover, advantages of partnering with CGIAR are recognized worldwide and CGIAR is thus not lacking partnering opportunities. For the Dutch agricultural sector to gain and maintain a spot on CGIAR's partnership radar, a first important step to take is therefore to create an understanding of how partnerships with CGIAR centers on the desired strategic level have generally come into existence.

PERSONAL NETWORKS

As is common in collaboration in research, most collaboration initiatives are initiated based on individual contacts between researchers. Based on the experience of various stakeholders, collaboration with CGIAR was found to be no exception. Having a network within the CGIAR proved to be very important in facilitating partnerships. Individual networks are often based on a history of prior collaboration among the parties, the exchange of staff and PhDs, joint publications, involvement of Dutch scientists in CGIAR committees and boards, and encounters of individuals on congresses, scientific conferences, or in the field. In most instances, collaborative initiatives then emerge bottom-up when researchers from both parties see complementarities in their work and a potential for synergy or added value of each other's expertise.

Good mutual familiarity among partners leads to mutual trust and may prevent problems in collaboration from arising. Mutual trust moreover lowers transaction costs associated with initiating a partnership, such as time invested into deliberation. Prior collaboration and partnerships of a long-term nature allow mutual trust to develop, facilitating future collaborative initiatives. Indeed, CGIAR researchers indicated that they are generally more inclined to extend existing collaboration than to initiate new partnerships. Staff mobility within CGIAR centers and comparable ARD institutes in general however does seem to be fairly large. Therefore, it is paramount not only to build extensive networks at one period in time, but to maintain such networks over time by regularly visiting conferences, joining exchanges, etc.

PROACTIVITY OF DUTCH PARTIES

There was a clear difference found in the number and extent of partnerships among CGIAR and Dutch parties that wait to be approached by CGIAR, and parties that are proactive in approaching CGIAR, continually lobbying for partnerships and pursuing several and diverse networking opportunities. Faculties and researchers within WUR that collaborate with CGIAR on various levels for example, were found to be very proactive, with most partnerships having come into existence based on WUR initiatives.

The many exchanges between the parties facilitate a clear picture of each other's strengths and capacities. ITC then for example, was found to be much less proactive in pursuing such partnerships and albeit several complementarities, there is no direct, straightforward connection between the foci of CGIAR and most ITC departments. Because of this, the opportunities for building a network within CGIAR based on encounters on congresses, conferences, etc., are smaller. Especially in such instances then, it seems to be important to dedicate time and effort toward building and maintaining a useful network within CGIAR, actively seek for and highlight complementarities, and to proactively pursue collaboration.

VISIBILITY OF RESEARCH AND EXPERTISE

Whereas the visibility of Dutch parties and their competences and expertise within CGIAR centers does not always seem optimal, this appears to work in both ways. Even within parties that as a whole are very proactive in approaching CGIAR centers with initiatives for collaboration, visibility of CGIAR's research areas and activities, or even the interest in collaboration, does not seem to be uniformly distributed among all organizational entities. One respondent from WUR for example, was describing a visit from IITA through which the CGIAR center indicated to be interested in collaboration with WUR researchers. However, even though invites for a joint seminar were sent out to all researchers that would potentially be interested, eventual attendance by WUR researchers was disappointingly low. These and other instances may be traced back to both a lack of proactivity, awareness and/ or interest on the Dutch parties' side, and a lack of transparency about current and planned projects on CGIAR centers' side.

COMPLEMENTARITY

Complementarity among partners was said to be very important. IWMI for example, works with a number of preferred research partners in each country, which were selected based on complementarity criteria. Moreover, IWMI indicated to always be actively seeking for complementarity with other potential partners. WUR for example has the ability to strengthen capacity of universities, something that is outside the field of expertise of IWMI.

When parties are active within the same area and have a clear joint focus, this may either lead to pragmatic collaboration or intensified competition. When collaborating, the pragmatic nature generally leads to lower transaction costs. When opportunities for collaboration are less straightforward however, and especially when moreover the potential partner does not bring any additional budget, many respondents appear to be frustrated because of CGIAR centers tending to uptake a reserved attitude, with many meetings and lingering conversations and explorations of complementarities, not leading to many significant partnerships.

GENERAL PROBLEMS IN CGIAR COLLABORATION

Whenever there is sufficient funding available, most parties collaborating with CGIAR generally describe their experiences with this collaboration as being very positive. In particular in collaboration based on individual familiarity and mutual trust, problems and difficulties can often be avoided and issues are being resolved on a fairly informal basis.

CGIAR FUNDING

However, the scope for partnerships is very dependent on availability of funding and CGIAR's budgetary organization seems to form an obstacle for collaboration with Dutch parties. CGIAR appears to be reluctant to deliver substantial financial backup to partnerships and, as mentioned before, appears to prefer to keep her budget within her own centers by keeping activities under its own control as much as possible and by relying on in-house expertise. Indeed, sources from within CGIAR confirmed that especially small CGIAR centers with limited budgets are fairly opportunistic when it comes to spending those budgets.

Since the CRPs were introduced, CGIAR centers do increasingly look at possible partnerships in a more strategic way, earmarking of their budgets however still severely limits the actual establishment of such partnerships. Because only a certain percentage of the CRP budget is financed by the consortium, centers have to secure additional finance, leading them to favor partnerships with partners that bring their own funding. Although there is budget available for partnerships, and although having been criticized for the practice in the past, centers still tend to hire researchers instead of forming partnerships with them. Budget increases then, are often leveraged to strengthen their own base.

If indeed, as according to CGIAR CEO Rijsberman, in the future CGIAR centers will have to spend 30% of their CRP funding on partnerships instead of the currently required 17%, incentives for entering into partnerships may be strengthened. However, depending on the nature of the CRPs, there may be variations on expertise residing within CGIAR. In GRiSP (CRP 3.3) for example, CGIAR is the locus of key knowledge and the role of partners may be smaller than in A4NH (CRP 4), in which CGIAR does not possess primary expertise. A target of 30% then, should best be indicative for the portfolio as a whole, allowing for variations among CRPs.

CGIAR'S FINANCIAL PLANNING SYSTEM

Complaints were moreover expressed about the financial planning system of CGIAR. Whenever CGIAR is financing collaboration, this funding is taking place in short-term cycles, within an unclear framework and subject to various preconditions. Multiannual financial commitments from CGIAR seem to be an exception rather than the rule. It might be that the new system has not yet stabilized sufficiently to adequately react to the large budgetary increases, causing CGIAR's account managers' are lack of insight into financial flows within the system until about halfway the year. Then, in the last three months of the year, money is made available to be spent on partnerships. This

cash flow problem leads to a lack of budget security and forces both CGIAR and its partners to be reactive rather than proactively planning long-term strategic partnerships, undermining the effectiveness of collaboration and the possibility for Dutch partners to make a substantive contribution to the partnership.

Because of the short-term focus of CGIAR's budgetary organization, the possibilities for hiring necessary extra staff to back up the partnerships are limited. Some researchers have found smart ways of circumventing these problems, e.g. by subcontracting small parts of the project with a time span of about two to three months to DLO researchers. Another smart solution is relying on recent graduates, who often are more prepared to work full time on a project basis for a short time span. However, the possibility of building up of a strong, long term strategic form of cooperation is still limited by these forms of collaboration.

DIVERGING WORKING METHODS

Another problem which was mentioned by several stakeholders is the diverging working methods of the parties. The CGIAR system is said to be very bureaucratic and is moreover characterized by a lot of deliberation, eating up time and resources of partners but often not leading to any concrete outcomes. An example is the before mentioned cooperation with IITA in the IN2Africa project. This project fits well with the Legumes CRP (CRP 3.5). CGIAR acknowledges WUR's expertise on this CRP and indicated to be interested in collaboration. However, a lot of deliberation has thus far not led to any concrete initiatives. It is moreover unclear whether CGIAR has sufficient funding available for such a partnership.

LACK OF TRANSPARENCY

Researchers indicated that more clarity about CGIAR's research agenda, insight into the diverse CGIAR research programs and transparency about the strategic consideration behind these programs would allow them to better anticipate on what is coming. In this way, means and research can be fine-tuned better and prior experiences and current activities may be combined to deliver value added to the process. By being involved on a strategic level in CGIAR's research agenda, this insight may be vastly improved.

These findings are confirmed by CGIAR in their 2012 Annual Report, in which they state:

“The ability of CGIAR to contribute to improving farmers' lives and livelihoods, and to ensure food security, ultimately depends on the strength of its partnerships. To ensure that we are being good partners ourselves, in 2012 we conducted an extensive stakeholder perception survey. The survey was sent to approximately 4,000 past, current, and potential partners; 1,071 responses were received from more than 115 countries. Respondents rated CGIAR in a number of categories on a seven-point scale ranging from 'very poor' to 'excellent'. The good news is that the results showed that stakeholders are generally positive about their partnerships with CGIAR, with an overall satisfaction rate of 75% expressed by current and former partners. CGIAR performed well in core areas of expertise – research outputs and research outcomes – especially in food security and sustainability. But the survey showed that these factors have a relatively

week impact on perceptions of satisfactory partnerships. The survey identified two major areas where CGIAR needs to improve its stakeholder engagement: transparency and collaboration.” (CGIAR annual report, 2012, p. 35).

COLLABORATION OVERALL

In short, there is already some significant cooperation going on between several CGIAR institutes, diverse Dutch partners, and on diverse levels. However, from several stakeholders a fairly consistent sound can be heard that in general collaboration with CGIAR momentarily mainly takes place on an informal basis, on individual projects, on an ad hoc basis, and based on one-sided dependence. It appears to be difficult to connect with CGIAR on a more strategic level, and parties that manage to do so are frustrated because of the complexity of such forms of collaboration, caused among others by a lack of transparency and availability of funding and clashing working styles. Collaboration on a project level is considered to be more straightforward and involving less complexity. However, only when external or own funding is available does such collaboration involving the joint identification and formulation of projects occur based on an equal basis between the partners.

Albeit the complexities in the CGIAR system and difficulties incurred when pursuing and ensuing collaboration, collaboration between Dutch parties and CGIAR still encompasses promising opportunities for both parties involved. Dutch parties which possess sufficient budget, a long-term scope and a high degree of complementarity with CGIAR CRPs might still want to continue pursuing collaboration on a strategic level on a CRP basis because of the opportunities such collaboration provides for obtaining insight into the strategic direction of these CRPs and the future possibilities for influencing this direction. For other parties, which may not have this kind of budget and scope for complementarity, the most fruitful avenue for collaboration appears to be to pursue the joint identification of projects for which external funding may be secured.

There are indications of the CGIAR system slowly changing in the right direction and further opening up for the involvement of external parties in their research. Based on how previous collaboration has been established, one may expect that establishment of relationships based on intensified collaboration will function as a catalyst fueling even more, and more effective, collaboration. By getting, and staying, involved in collaboration with CGIAR now, in due time networks within CGIAR will strengthen and the buildup of trust and common working methods will be facilitated. Based on this, the profile of these parties for future collaboration will be strengthened, and transaction costs involved with these collaborative initiatives will diminish. The main responsibility for securing and maintaining such partnerships lies with the parties that desire such collaboration, who need to continue to be proactive in approaching CGIAR, to actively seek and highlight complementarities, and build and maintaining their network in CGIAR and ARD. Moreover, for a successful management of partnerships it is very important for partners to adapt themselves to each other's needs and ways of working. Partners have to take into account the currently still often impulsive character of partnerships

because of the CGIAR centers' yearly budget cycles and need to be prepared to be available for collaboration on a short-term notice.

Building the necessary trust for fruitful collaboration however may be compromised when initiation of such collaboration proves troublesome. Hence, facilitating the initiation of such collaboration by the Dutch government may provide both short term, project based advantages and longer term advantages in that initiation of such collaboration will become increasingly easy and more straightforward. There are several possibilities for the Dutch government to facilitate the strengthening of the profile of the Dutch agri-sector for CGIAR collaboration. To maximize contribution and impact of the Dutch agricultural sector, means should be explored to involve Dutch parties in the dialogue and in the development of strategic research programs. Leveraging of the Dutch experience with operating in the Dutch Diamond and PPPs should be ensured to offer opportunities for innovative new forms of collaborating with CGIAR. Several possibilities to do so will be further elaborated on below.

POSSIBILITIES FOR IMPROVING THE DUTCH POSITION

Ideally, a structure should be sought in which the Dutch government stimulates cooperation among CGIAR and Dutch institutes on a fair and equal basis, sharing risks and opportunities. This structure should ideally remove or alleviate the barriers and constraints to cooperation and initiation of collaboration that are currently experienced, facilitating both current and future successful and effective collaboration. However, care must be taken that such a structure would not provide perverse incentives to the CGIAR system, stimulating CGIAR centers to select sub-optimal partners or undertake projects that are supply-driven instead of being based on what is most salient at the BoP.

Instruments currently leveraged by the Dutch government to facilitate involvement of knowledge institutions and other Dutch partners in CGIAR research are limited. Because concentrating funds is an important policy aim, the Dutch invest a significant part of their budget for ARD in the CGIAR. By untying this investment and by relying on CGIAR's competence to select the most suitable partners and establishing effective partnerships with them, the Dutch are relinquishing their influence on which partners are being involved in CGIAR research, albeit by making choices on CRPs through Window II financing, which will be further explained below, they attempt to fund closely in line with their policy priorities and Dutch expertise.

Public support for the Dutch funding of the CGIAR is an important issue. Such support may be secured and retained by being able to explain that the CGIAR is focusing on the right issues, that results are being achieved on the programs to which Dutch funding is being channeled, and that the Dutch agricultural sector itself benefits from CGIAR funding because of the partnerships that result from it. Clearly, to ensure public support for the decisions that the Dutch government takes related to CGIAR funding, Dutch knowledge institutions, NGOs, and private sector that have a stake in agriculture for development should be included in the decision-making process, e.g. by including these parties in discussions preceding, and consulting them for, ARD policy and funding decisions. The Dutch government should moreover clearly communicate her eventual decisions and motivation for these decisions. Being open for critique may not be sufficient. One respondent for example indicated to once have approached DGIS for funding for a collaborative initiative with CGIAR. They were welcome to discuss their proposal but subsequently received a denial of funding, with a sole motivation of there not being funds available to support the initiative. This lack of motivation for the denial subsequently led to frustration and disillusionment with the parties involved. By clearly communicating why there are no funds available and why the decision was made not to fund separate initiatives, a stronger public support base may be built.

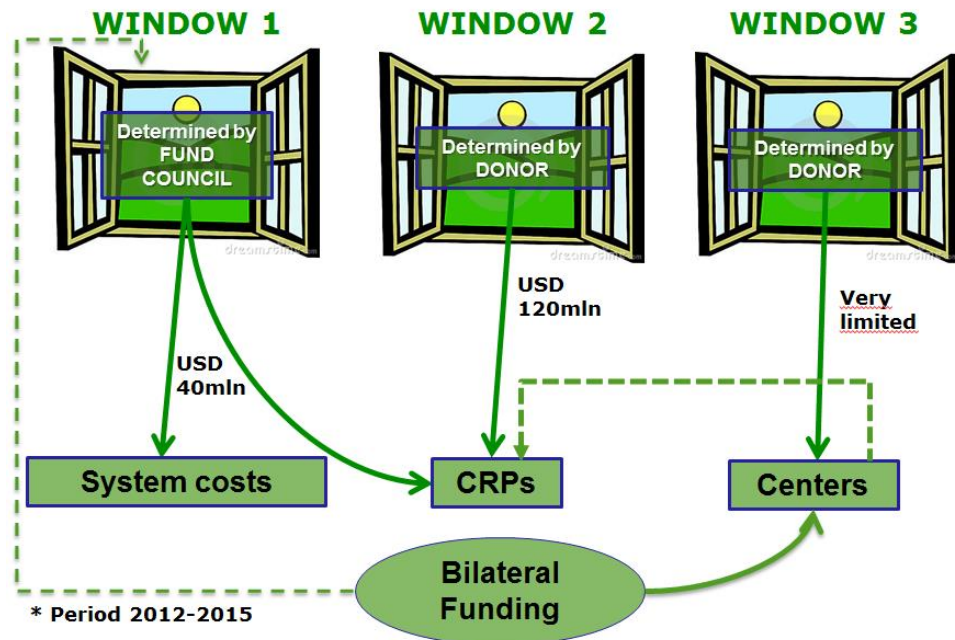
SMART CGIAR FUNDING

DUTCH FUNDING STRATEGY

CGIAR is currently experiencing an increasing funding trend, with a total increase in funding exceeding 20% in 2012; the largest increase in the history of its existence. CGIAR moreover aims to secure funding totaling USD 1 billion in 2013. A significant part of its funding comes from the countries that are united in the European Initiative for Agricultural Research for Development (EIARD), in which the Netherlands is also included. More than third of the total CGIAR funding of 2012 was not earmarked.

Within the framework of the policy spearhead of Food Security, the Netherlands has committed itself to a multiannual contribution to contribute towards financial stability, predictable financing of research with a long time span, and a timely disbursement of donor money. With its multiannual commitment totaling to more than USD 165 million, the Netherlands is the largest multiannual donor. In 2012 the Netherlands funded USD 37.8 million, making her the fourth largest donor and the second largest donor of the EIARD members, after Sweden. The Dutch contribution to the total funding received by CGIAR in 2012 totaled to approximately 7,4%.

To maximize coordination of contributions, lower transaction costs, and avoid fragmentation of financing and research, CGIAR created 3 so-called Windows through which donor contributions may be channeled. This funding system and the Dutch funding strategy is illustrated in the image below.



Both CGIAR and the Netherlands aim to channel at least 70% of the total finance through Window I and Window II; in 2012 94,7% of Dutch CGIAR financing was channeled through these two windows. The Netherlands financed USD 5.8 million through Window I (seventh largest donor, a little more than 3% of total Window I financing). Contributions channeled through Window 1 relate to contributions that are the least restricted; the Fund Council decides about budget allocation and there are no further preconditions tied to the finance. Funding through Window I thus provides maximum flexibility to the Fund Council to decide how these funds are allocated to CRPs, used to pay system costs such as the Fund Office, the Independent Science and Partnership Council (ISPC), the monitoring system, etc., or otherwise applied to achieving the CGIAR mission. The Netherlands can exert some influence over budget allocation by her seat in the Fund Council.

Contributions to Window II are intended to finance specific CRPs and provide an opportunity for donors to align their contributions with their own policy priorities. Because there is a risk of Window I funds to be spent on leftovers such as system costs, and specifically to align funding with Dutch policy, the largest chunk of Dutch funding is channeled through Window II. Specifically, CRPs funded through Window II were selected based on prior discussions with Dutch stakeholders including DDE, DME, EL&I (currently Economic Affairs) and involved knowledge partners. The eventual selection of CRPs 1.1, 2, 3.4, 3.7 and 4 to 7 is based on the CRPs' interlinking with current knowledge and research policy, the policy spearheads of food security and water, the targeted linkage with the Dutch Top sectors of Horticulture and propagation materials and water, and the Multiannual Strategic Plans (MJSP's) of the Dutch embassies. An overview of the CRPs and Dutch funding of these CRPs may be found in annex 1.

The linkage between CRP funding and Dutch knowledge and expertise will never be based on a 1-to-1 relationship, however. When the Dutch government chooses not to finance a CRP, this does not mean that there are no possibilities for Dutch parties to collaborate on this CRP. The other way around, Dutch CRP funding does not guarantee partnerships with Dutch parties on those CRPs. Targeting funding to CRPs however, may facilitate access to more information regarding the research and planning of those CRPs.

The eventual exact allocation of the funds is again entrusted to CGIAR, specifically to the lead centers of the CRPs. Approximating 25% of total Window II financing in 2012, constituting the latest period for which a CGIAR annual report is currently available, the Netherlands was the largest Window II donor. Note however that at that time, the Window funding system was still novel and funding of other donors may have changed in the meantime.

Channeling funding through Window III offers the most straightforward opportunity to posing preconditions regarding cooperation, because through Window III funding specific projects involving Dutch partners may be financed. However, because the Dutch want to avoid CGIAR research becoming too supply driven, Dutch Window III funding is very limited; with a total contribution of USD 2 million Dutch Window III funding

constitutes a little more than 1% of total Window III financing. Dutch bilateral funding outside the Window system is also very limited.

FUNDING OF OTHER DONORS

Several other members of the CGIAR Fund Council that are also members of EIARD were interviewed to discuss the motivation behind, and the advantages and disadvantages of their financing strategy. Contributions of other CGIAR donors in 2012 are listed in the table below.

Receipts	Window I	Window II	Window III	Provisional	Total CGIAR fund
Australia	8,8	20,5	11,3		40,6
Bangladesh**			0,1		0,1
Bill & Melinda Gates Foundation		1,5	24,3		25,8
Canada	15,6				15,6
China		0,1	2,7		2,8
Denmark	3,1	3			6,1
European Commission			21		21
Finland	1,3	1,3	1,3		3,9
France	1,2				1,2
IDRC		8			8
IFAD			2,6		2,6
India	0,7	0,5	1,8	0,1	3,1
Iran			0,5		0,5
Ireland		1,9	3,4		5,3
Japan	0,1	0,7	1		1,8
Korea	0,3				0,3
Luxembourg	0,3		0,4		0,7
Mexico		0,5	0,5		1
Norway	18,5				18,5
Portugal			0,6		0,6
Russia				3,8	3,8
Spain			0,5		0,5
Sweden	17,6	20,6			38,2
Switzerland	6,5	6,7	1,9		15
Thailand			0,1		0,1
Turkey			0,5		0,5
United Kingdom	51,4		22,6		74,1
United States of America	0,5	21	85,5	16,1	123,1
World Bank	50				50
Sub-total 2012 receipts	183,7	116,3	184,6	20	504,5
Belgium*		7,1	1,3		8,4
Nigeria*	0,5				0,5
Iran*			0,5		0,5
Total 2012 contributions	184,2	123,4	186,4	20	514

* Contributions that are supported by a signed contribution agreement but for which the money has not yet been received by December 21, 2012.

** Includes contributions that have been received but for which the contribution agreement is still in process.

Source: CGIAR Annual Report, 2012, p. 39.

As explained before, because longer commitments are a key element of the reform to foster financial stability, predictable funding for long-term research, and timely disbursement of funds, the Netherlands have made a multiannual commitment. Other multiannual donors that are also members of EIARD include Denmark, Luxembourg, Spain, and the United Kingdom. A longer CRP planning cycle with targets and milestones would help some donors in planning their funding; it is however still difficult if not impossible for some donors to commit to multi-annual funding.

Sweden adheres to a funding strategy which is very comparable to that of the Dutch, albeit without a multiannual commitment. The Swedes fund a total of USD 17.6 million through Window I, and USD 20.6 million through Window II without tying additional preconditions to their funding. They indicate however to be facing the same issues regarding cooperation and the same pressure from Swedish knowledge institutions to facilitate increased involvement in partnerships. It is notable then, that the two largest CGIAR donors from EIARD, both providing untied funding, at face value both appear to be last in line when it comes to establishing partnerships with CGIAR. It remains to be seen however, whether this is actually the case or whether this is merely assumed by stakeholders because other donors do tie their funding to preconditions regarding partnerships.

The UK then, channeled USD 22.6 million, which is approximately 30% of their total funding, through Window III, funding bilateral programs such as HarvestPlus. They indicate however, to want to keep bilateral funding to a minimum. The other approximately 70% of their funding, totaling to USD 51.4 million in 2012, is being channeled through Window I, based on their view that CGIAR should be trusted and empowered to direct its research towards global priorities. There has been some discussion going on to start directing funding through Window II and focus on specific CRPs, but until now to facilitate the system it was decided to continue funding through Window I.

The UK does see some opportunities to tie its Window III funding to conditions for partnerships with UK institutions, they indicate however that the money flowing back to the UK through such partnerships is expected to be small. Therefore currently there is no mechanism to channel resources donated by the UK back to UK-CGIAR partnerships. When there would be, it may still be difficult to move beyond small scale programs. Albeit the UK indicated that they would like to see more UK engagement within the CGIAR system, and tying conditions to its funding is expected to expand political support for CGIAR funding, they indicate to be very reluctant to use earmarked funding to realize such increased engagement.

Because of the listing of France as solely funding USD1.2 million through Window I, they appear to be a very modest CGIAR donor. However, France delivers a significant part of its contribution in kind; in 2012 they contributed 30 CIRAD researchers to be directly involved in CGIAR research centers, they donated the building for the Consortium Office in Montpellier, and exempted CGIAR from taxes by granting the consortium diplomatic status. In doing so, merely the funding involved in contributing the CIRAD researchers

adds up to USD 6 million annually. When CGIAR locates CIRAD researchers overseas, CGIAR carries the additional costs.

This way of supporting CGIAR has facilitated an agreement between CIRAD and the CGIAR for them to meet regularly to fix common priorities. France spends a lot of money on ARD through its own institutions and pursues synergy between its own scientific programming and that of the CGIAR, lowering the costs of the joint research. Clearly, by providing CIRAD researchers increased collaboration between French institutions and CGIAR is facilitated. Other in kind contributions however were said to not have led to more partnerships with French parties.

The Swiss funded USD 6.5 million through Window I in 2012. Because they did not want to put all eggs in one basket, and the CRPs are close to Swiss' national policy on food security, they funded USD 6.7 million through Window II. They explicitly attempted to balance Window I and Window II funding to give off a signal to CGIAR. They did not tie any conditions to Window I and Window II funding. The Window III funding of USD 1.9 million is a remainder of Swiss' contributions to CGIAR's previous Challenge Programs, and will be phased out when they are completely integrated into its CRPs.

Next to Swiss' multilateral budget however, they have a separate budget for bilateral funding of ARD, from which they dispersed between USD 7 and 8 million in 2012 which is not included in CGIAR's financial summary. Whenever CGIAR centers and Swiss institutions are expected to have complimentary competences on specific projects or research programs, the Swiss tie conditions to their funding to involve those parties.

Moreover, the Swiss have a separate fund for research which is comparable to the Dutch instrument of NWO-WOTRO. There are regular calls for research with a food security theme, requiring the involvement of Southern research partners. CGIAR centers are then regularly involved in partnerships in responding to those calls. This instrument is considered by the Swiss to be the most effective in facilitating partnerships between Swiss institutions and CGIAR because funding problems of such partnerships are being avoided.

Although CGIAR strives to keep Window III funding to a minimum, the European Commission (EC) solely channels its funding totaling USD 21 million through Window III. Because CGIAR is an international organization it has no fiduciary responsibility and thus the consortium is no legal entity, complicating EC funding of the CGIAR. As a loop to ensure that funds are safeguarded according to European financial regulation, funds are thus channeled through Window III. The EC has made agreements in advance with the recipient CGIAR centers on which activities and components should be covered with its funding.

Taken together, it appears that preconditions of other EIARD members regarding cooperation with stakeholders from their countries are not as many and as influential on eventual partnerships as anticipated. Some respondents, also from within CGIAR, did indicate however that they were under the impression that some donors from US origin

such as USAid and the World Bank are attempting to direct CGIAR towards partnerships with US institutions.

TYING CGIAR FUNDING

Several respondents indicated to have reservations with the Dutch decision to provide untied funding to the CGIAR. They feel that because other donors did tie their CGIAR funding to more or less extent, Dutch money is being spent on partnerships with parties from such countries and the Netherlands is last in line for partnerships. Moreover, Dutch parties are relatively expensive compared to knowledge and research institutions from such other countries, further limiting the potential for Dutch parties to enter into collaboration (partly) funded by CGIAR. CGIAR may prefer local partners not for their merits but for lower costs, and may therefore prefer to integrate specific knowledge present in the Dutch agri-sector by other means not involving partnerships. Many respondents thus argue for a more nuanced financing strategy including some minimal requirements for involving Dutch partners, preferably already in the stage in which project proposals are formulated.

Albeit tying preconditions regarding collaboration with national parties to CGIAR funding does not necessarily contribute in its maximum potential towards the end goal of facilitating effective ARD involving collaboration with the right partners from both an effectiveness and efficiency perspective, applying such conditions may contribute towards a more institutionalized collaboration between CGIAR and Dutch parties. Some stakeholders argued that a soft earmark of funding is more appropriate in the current time frame in which aid again may be combined with self-interest. One way of doing so would be to direct a larger portion of total funding through Window III or to reserve a chunk of the budget for bilateral funding of projects that involve Dutch parties as partners. Capacity building might also be a possible string, in which requirements are given regarding the training of students at Dutch institutions. Another example of tying part of the budget may be to apply a withhold policy, e.g. in which 10% of the finance is being withheld when CGIAR fails to attain some minimum level of partnerships with Dutch institutions.

However, tying conditions such as these to Dutch funding of CGIAR will involve a larger burden because it should involve an explicit search for complementarities between Dutch expertise and CGIAR research. Administrative costs may also increase significantly. Moreover, when funds are being earmarked based on donor's priorities, e.g. by means of bilateral or Window III funding, fads and fashion of donors are reflected and not necessarily the most urgent priorities are being addressed. A significant withdrawal of Window I funding moreover carries the risk of CGIAR being incentivized to keep even more funding within its own organization to cover their fixed costs. Moreover, it would be giving off the wrong signal; when all donors were to pull all their funding from Window I and Window II and switch back to Window III and/ or bilateral funding, CGIAR's CRP structure would no longer function. In the worst case scenario, the system might even collapse entirely.

Moreover, when funding bilaterally, donors are trading off their influence on the system as a whole to influence on the separate parts of the system, i.e. the separate projects and/or CGIAR centers. The CGIAR system is being recognized to not be functioning optimally within its new CRP framework just yet. As mentioned before, it has among others been criticized to still be too introverted and non-transparent, and it should be stimulated to collaborate more, with whatever partners. In a system subject to such criticism, it seems important to focus on using one's influence on the system as a whole to make the system more effective. By funding through Window I and Window II, the Netherlands may exert a broader influence throughout the system and on the consortium than she would when funding bilaterally through Window III.

Many stakeholders arguing for tying partnering conditions to Dutch CGIAR funding moreover recognize that CGIAR centers may be incentivized to choose suboptimal partners when responding to requirements imposed by donors. There is no reason to believe that Dutch preconditions would not provide the same incentives. What is more, CGIAR researchers indicated that handling all different preconditions of other donors is a tedious and time consuming task, limiting their productivity and the effectiveness of the system.

FUNDING IN KIND

Secondment of Dutch researchers at CGIAR then, as is done by the French, may be an effective way to circumvent financing issues of collaboration between CGIAR and Dutch parties. Meanwhile, staff that is being seconded can broaden their experience base and build a network within CGIAR. Moreover, they bring their own network among Dutch parties and can increase visibility of fields of work and specializations of their institutions. Another form of in kind financing may be to donate a building in the Netherlands to one of the CRPs, e.g. CCAFS, or one of the centers.

However, there is no guarantee that the researchers that are being seconded are the best researchers for the task, or possess the right expertise for specific projects. Moreover, albeit secondment of CIRAD researchers was said by the French to greatly facilitate cooperation, French in-kind contributions have to date not led to a demonstrable leverage on French involvement in CGIAR research beyond their seconded researchers or French influence on the CGIAR system.

Besides preconditions to Dutch CGIAR funding or funding in kind however, there are several other opportunities to strengthen Dutch profiling that currently are not being leveraged to their full potential.

SEED MONEY/ MATCHING MONEY

A possibility to facilitate partnerships with Dutch stakeholders through which direct preconditions for collaboration tied to CGIAR funding may be avoided, would be to set aside a chunk of the CGIAR budget to establish a separate fund to support CGIAR – Dutch partnerships. This seed money or matching money may then act as an amplifier for attracting additional finance. The instrument could moreover be leveraged to stimulate collaboration between CGIAR and the Dutch private sector. By reserving a

budget to provide financial support for collaborative initiatives in line with Dutch policy, which may otherwise not be realized due to lack of funding, with a relatively small amount of funding the emergence of relationships may be facilitated while avoiding the trap of over-steering this research on Dutch priorities.

STAFF INVOLVEMENT

Based on the observation that so many collaborative initiatives emerge based on personal ties between researchers, facilitating strong ties between Dutch stakeholders and CGIAR centers and researchers seems paramount. A feasible option to strengthen the network between CGIAR and Dutch institutions and other stakeholders might be to lobby for the placement of staff that is aligned with those institutions or stakeholders on strategic places within CGIAR. With so many collaborative initiatives emerging bottom up because of prior acquaintance among individuals, the possibility of strengthening ties with the CGIAR by strategically placing former students, researchers, employees, etc. of Dutch stakeholders appears to have huge potential to facilitate collaboration. These 'insiders' would bring their network within the Dutch agri-sector with them, which they may fall back on later when entering into partnerships on regard of CGIAR centers or research programs. When they would return to Dutch institutions later on, they will bring along with them an expanded network within CGIAR. Insight within CGIAR into complementary expertise and areas in which collaboration with Dutch stakeholders would potentially be desirable and achievable would moreover be increased. The question then remains which would be these strategic places, how staff may get involved, and which type of persons would be best to involve.

For the research at hand, an inventory of current Dutch presence within CGIAR was made, an overview of which is available at the Dutch Ministry of Foreign Affairs. Note that this inventory is based on internet search and respondents' referrals, and thus may not be exhaustive.

Within most CGIAR centers there was said to be a strong Anglo-Saxon representation, which was expected to tip the balance towards targeting Anglo-Saxon parties to engage in partnerships. Taking into account the large staff base of CGIAR, current Dutch representation within CGIAR can be said to be limited. Some Dutch are occupying senior positions within CGIAR, e.g., Frank Rijsberman as CEO of the consortium, Martin Kropff as Consortium Board member, Olaf Erenstein as Director of CIMMYT's socio-economics program, Maarten van Ginkel as ICARDA's Deputy Director General for research, Meine van Noordwijk as ICRAF's Chief Science Advisor, Simon Oosting and Imke de Boer as members of the Lifestock & Fish CRP's Science and Partnership Advisory Committee, Sonja Vermeulen as CCAFS' Head of Research, Bas Bouman as Director of the research program on rice, Marco Wopereis as Deputy Director General and Director of Research for Development of AfricaRice, etc.

Dutch occupying such positions may be stimulated to leverage their influence towards the establishment of partnerships with Dutch parties or steer towards increased involvement of Dutch parties in CGIAR. By being a member of the CGIAR Consortium

Board for example, Martin Kropff managed to facilitate a meeting of the CGIAR Fund Council at WUR. However, it should be kept in mind that a senior function within CGIAR involves taking on the related responsibilities, which eventually boil down to contributing towards CGIAR's mission irrespective of which parties are included in collaboration. Care must be taken then with regard to double affiliations and expectations related to such affiliations. It is always useful to have the right persons on senior management places within CGIAR, but care must be taken that incentives within CGIAR towards optimally contributing towards its mandate are not being distorted because of double affiliations of individuals fulfilling such senior positions.

It must moreover be noted that EIARD is already pursuing an agenda to ensure strong European representation within the CGIAR. They are keen to assure that the main criterion of the selection of these people is not related to geographical or political reasons, but that the most competent people are placed on the important posts. Getting more Dutch involved on such places may then have to be achieved through Dutch lobbying within EIARD, however clear substantiation regarding the competence of such individuals should be included in the motivation, going beyond the strategic importance for Dutch collaboration in hiring Dutch for these positions.

With partnerships and other collaborative initiatives generally emerging bottom-up, it may moreover be more useful to ensure that there is sufficient Dutch representation within CGIAR centers on those levels on which collaboration actually is established. Such strategic positions may then be the positions of senior researchers and advisory committees rather than senior management. Indeed, several Dutch respondents occupying such positions within CGIAR indicate that they regularly leverage their network among Dutch institutions and that Dutch staff placement on such positions may indeed contribute towards more collaboration, especially on a project level. There may be multiple feasible courses of action toward increasing such involvement, which will be further elaborated upon below.

Note however that high staff turnover within CGIAR is still an issue which should be taken into account when targeting an increased Dutch involvement in CGIAR. It must therefore somehow be ensured that there is a recurring exchange of staff among Dutch institutions and CGIAR. With a critical mass of insiders within CGIAR, a stronger lobby towards collaboration with the Netherlands may be set into movement, facilitating the implementation of partnerships with Dutch parties.

ASSOCIATE EXPERTS PROGRAMME

The Netherlands Associate Experts programme (also referred to as Junior Professional Officers (JPOs)) provides university graduates with the possibility of acquiring work experience on entry-level positions within international organizations. The program is open to both Dutch candidates and candidates from developing countries from a list of eligible countries. These JPO positions are 100% financed through Dutch ODA budget.

The JPO program thus provides an opportunity to place young researchers on entry-level positions in several CGIAR centers. It provides an excellent opportunity for these

researchers to broaden their field experience base and to increase their future job opportunities. Moreover, when these researchers are retained within CGIAR, their initial involvement through the JPO program is expected to have contributed towards loyalty of these researchers towards the Ministry of Foreign Affairs, creating a link back to the Netherlands. Retention rates are very variable and there are no specific retention rates available for CGIAR JPOs; in total an average of 30% of JPOs is retained in the organizations in which they were placed.

Some respondents did indicate however, that more substantive alignment with the institutions these JPOs have graduated from would be desirable. By basing the selection of JPO positions on areas in which there is great potential for complementarity and synergy of research when collaborating, the JPO instrument may be leveraged to its maximum potential and the possibilities of collaborative initiatives emerging from such positions are increased. Moreover, several CGIAR centers having received JPOs indicated that these JPOs often do not have very strong ties with their institutions and are often not very aware of their institutions' research areas and expertise. Care must thus be taken to ensure that selected graduates for the positions have a clear overview of the activities and expertise of the institution they are aligned with within the respective area in which they will be placed, so as to provide opportunities for JPOs contributing towards increased awareness within CGIAR about the activities and expertise of those institutions and the potential of complementarity and synergy when collaborating.

Moreover, by definition, JPOs are young and may not yet be very skilled in building and maintaining their network. It may therefore be advisable for academic institutions to invest time into developing their students' networking skills. Moreover, institutions delivering such JPOs may offer opportunities to them, either when they are still students or when they have been selected for the position, to expand their network among the researchers of their institution/ faculty. Indeed, a former CGIAR JPO indicated that because of her small initial network and limited networking skills, and after years of working abroad, her network among Dutch institutions or even the university where she herself studied, had strongly diluted.

However, for the last CGIAR funding period of 2012-2015, no budget was available to fund such JPO placements in CGIAR. When the recommendations above regarding the formation of such JPOs are taken into account, the instrument has potential to contribute toward strengthened ties between Dutch institutions and CGIAR and toward future collaboration. It would therefore be advisable to ensure that for the coming funding period, budget is being made available and JPO positions are carefully selected based on an assessment of complementarity with Dutch expertise.

STAFF EXCHANGE

Exchange of staff between CGIAR and Dutch stakeholders constitutes a relatively low-key, low-cost possibility for strengthening ties between these parties and was specifically mentioned by many respondents as an excellent way to facilitate the buildup of personal networks contributing towards scope for collaboration. Although in many

cases the exchange or joint appointment of PhDs and postdocs, staff sabbaticals at the other party, etc., do not encompass large projects, these are sound and clear constructions with which most scientific parties have experience, and which were said to often lead to more concrete partnerships. An institutional exchange of staff and interests may be expected to both lead to strengthened ties and to contribute toward an increased insight of the involved parties into each other's' areas of expertise and scope for complementarity.

ITC for example says to create several possibilities for visiting scientists, which has eventually led to the installment of a joint PhD student. A WorldFish staff member working in secondment at KIT indicated that by being physically present at KIT, she expanded her network and gained a much better picture of what is going on at KIT and where possible complementarities lie. Because of this, she expects to be more inclined toward initiating partnerships with KIT. There are also a lot of exchanges between for example IWMI staff and Dutch organizations, facilitating cooperation with those organizations. Such exchange may be done at low cost, e.g. by leveraging scholarships or seconding staff, and is expected to generate results within five years; it may thus be an interesting possibility that is currently not yet being exploited to its full potential by Dutch institutions.

Perhaps funding CGIAR staff sabbaticals at Dutch institutions may thus be an option for the Dutch government to facilitate the strengthening of the Dutch profile for collaboration. While being seconded, this staff may build their network within the Netherlands and increase their insight in Dutch expertise and possible complementarities.

STRONGER POLICY ALIGNMENT

A strong strategic agenda of government, knowledge institutions and the private sector has the potential to connect international and national policy instruments, and may potentially contribute towards more visibility and an increased impact. Increased synergy between the diverse means, institutions, and policy areas can potentially contribute toward a more structural, long-term dialogue regarding collaboration with CGIAR and other (multilateral) institutions involved in ARD, to the possibilities for a timely response on new developments and calls for research, and to a diminished competition between CGIAR centers and Dutch parties operating in the same fields.

DLO

The Dutch Ministry of Economic Affairs, performing a steering function on DLO research, may reserve a chunk of DLO funding to facilitate partnerships between DLO and CGIAR. This funding may then be leveraged as an amplifier to attract other sources of funding for the research undertaken. Some CGIAR centers indicated to be more interested in cooperating with DLO than with academic institutions because of the larger scope for partnerships in the field not necessarily involving publications. DAK steering DLO towards CGIAR partnerships and application for DAK funding however may prove to be complicated because of the DAK policy and funding being fixed to a large extent in Top Sector policy.

NWO-WOTRO

A way in which the Dutch government could facilitate collaboration between the CGIAR and Dutch institutes and organizations would be to open restricted calls for partnerships specifically involving both CGIAR and Dutch organizations, or to work with some kind of point system in which extra points are granted to proposals involving CGIAR centers. By launching calls requiring CGIAR involvement, with a relatively small amount of funding outside of the ODA budget the development of relationships may be facilitated, which can be built upon in subsequent collaboration. A recent call for research of a US donor provides a good example of a comparable strategy. This call promised USD 100.000,- for a collaborative initiative involving a CGIAR center and a US institution. Germany's GIZ also regularly launch calls for research targeting CGIAR – German collaboration.

A lot of existing collaboration could easily be up scaled if there would be additional funding available. Thus, there is scope for efficiency and synergy if WOTRO calls, besides funding new research, would be linked to opportunities on the ground and would build on or join up on existing activities. A concrete example of such a project which could easily be up scaled is a CIAT-led project in Asian countries in which SNV is involved, involving the production of cassava. Another example is a similar development project in Kenya which has enormous potential to be up scaled to a regional project, if only there would be sufficient funding available.

WOTRO is being seen by several respondents as a logical funder of collaboration. WOTRO stresses the need for involvement of local national agricultural institutes. CGIAR involvement may then be important because it has both the contacts with local

institutions and disposes of excellent facilities to conduct the research. Previously, collaboration through a joint response on WOTRO calls was not a very viable option because of requirements of 20% co-funding of the research by the partner. Because the intention was that co-funding was not being supplied from the research field, co-funding from research institutions was not being accepted as fulfilling the 20% co-funding requirement. To facilitate collaborative initiatives involving CGIAR centers, this requirement has been eased.

There may also be possibilities for such a strategy in the Geodata for Agriculture and Water (G4AW), a facility of the Ministry of Foreign Affairs targeting improved and increased sustainable food production and more efficient use of water in agriculture, in the Food & Business Knowledge Agenda, in NUFFIC calls, or in European calls for research, e.g. Horizon 2020. A disadvantage of steering towards collaboration by means of calls for research is that this collaborative research will be supply driven. Measures should thus be taken to curb this incentive toward supply driven research. Another possibility to avoid such supply driven research would be to tie a precondition to the Dutch CGIAR funding, requiring that a percentage of CGIAR calls for proposals through NWO-WOTRO. Doing so would create both more insight for Dutch parties into CGIAR's research agenda, and facilitates the involvement of these parties in this agenda. In both cases, it must however be taken into account that some institutions such as SOW-VU may experience difficulties in responding to such calls due to lack of core funding, as was explained in the section on collaboration with Dutch parties in the report at hand.

GLOBAL RESEARCH ALLIANCE

From June 2014 onwards, the Netherlands will be the chair of the Global Research Alliance (GRA), an alliance aiming to bring countries together to find ways to grow more food without increasing greenhouse gas emissions. There are opportunities then for the GRA to provide a broking role between Dutch and CGIAR research. Because of its focus, GRA is most relevant for CGIAR's CCAFS CRP (CRP 7). Indeed, the GRA is an official CCAFS partner. The report of Schaap & Pulleman (2014) on alignment between Dutch policy on CSA and CCAFS research will thus provide a further elaboration on the possibilities of leveraging the GRA to facilitate Dutch-CGIAR partnerships.

LEVERAGING THE PRIVATE SECTOR

As mentioned before, to date there are few examples of CGIAR collaborating with the Dutch private sector. Indeed, collaboration with private sector parties constitutes a weak point of CGIAR, and the organization is very careful with undertaking such collaborative initiatives. Such collaboration however could potentially provide added value. A change in culture within CGIAR may then be necessary before the private sector can be fruitfully involved.

A strong selling point of Dutch institutions is their experience in collaborating in the so-called Dutch Diamond, encompassing collaboration between agricultural research and education, business, and government. Large international corporations such as Pepsico are increasingly interested in food security. The Dutch private sector, specifically

business in the field of dairy and fish, indicated to be prepared to invest in developing countries. CGIAR in turn, indicates to have a high appreciation of the Dutch private sector. WUR for example, is regularly being approached by CGIAR for her experience in collaborating with the Dutch private sector. Because of the lack of transparency in the CGIAR system however, it is still unclear for private sector parties where they may find alignment with CGIAR research. There may thus be a potential role for the Netherlands in facilitating such alignment by acting as a match maker.

There are several ways to involve the private sector in CGIAR research. Private parties may contribute funding, although there are concerns that co-funding from the private sector, such as is being done in the Dutch PPP model, is not feasible for CGIAR research. There is still little experience and economic interest for businesses to invest in ARD. Whereas the private sector generally seeks to get their innovations to be patented in order to be profitable, part of CGIAR's mandate is to make research findings publicly available. Collaboration then may only be realistic considering pre-competitive research or for the implementation of results on the ground, e.g. creating new markets. Involvement of the private sector in CGIAR programs may safeguard sales and inputs to smallholders aiming to increase their production and efficiency.

Other involvement of the private sector may constitute contribution toward capacity building, or leveraging private involvement for application of results or to enlarge research capacity within local business. However, because CGIAR research may be considered an International Public Good (IPG), care should be taken regarding private funding.

There are concerns however, that to date CGIAR is not working innovatively enough to effectively link companies to its research. Moreover, for creation of innovation and impact, other institutions are necessary that need to function effectively. For stimulating this innovation mindset, a focus on the individual CGIAR centers may be desirable. An innovative mindset may moreover be stimulated by training CGIAR researchers, something which may be contributed towards by Dutch knowledge and research institutions.

In order to effectively stimulate private involvement in CGIAR research, a close look should first be taken to existing successful collaboration between CGIAR and private sector parties. Lessons learned may then be leveraged to strengthen such collaboration and transfer the concept to other CGIAR centers. CIFOR and CiP for example, already extensively collaborate with the private sector. As a relatively new construction, ICRAF is collaborating with Mars in a PPP. Other CGIAR centers are very interested in the results, although the PPP construction is not 1 on 1 transferable because of different mandates of CGIAR centers. At the 2nd of June, 2014, there will be a gathering during which possibilities for ICRAF to collaborate with the Dutch private sector will be further explored. Organizing such gatherings may form a useful starting point to explore the scope for collaboration.

A mean that is being considered as a powerful instrument to leverage strategically to involve the private sector in ARD is the seed money instrument. At NWO-WOTRO currently there are about 7 projects up and running in the Applied Research Fund, with a latest call on April 15. The Top sector Agrofood recently launched a call for seed money projects as well, which generated a lot of interest. Moreover, former private sector management may be placed on strategic management positions within CGIAR to facilitate the search for complementarity and stimulate collaboration with the Dutch private sector. Indeed, a former senior Unilever manager who is now working for CGIAR indicates that he brought his network, which he now leverages within CGIAR.

Moreover, a return to financing a number of specific commodity programs that have a strong alignment with the Dutch private sector and the Top Sectors, as well as to the value chains frequently mentioned in MJSPs, may be very helpful in facilitating collaboration. Care should be taken however that a positive spinoff to Dutch expertise is not being limited to the selection of these programs. Finally, competitive calls for research of G4AW are currently still targeting PPPs to a large extent. When these would be specifically targeted toward pre-competitive and problem-oriented research involving both CGIAR and private partners, such collaboration may be facilitated. The same goes for cleverly targeting calls from the Food & Business Knowledge Agenda.

TOP SECTORS

Policy regarding top sectors to date is regarded to be successful, but was said to be capitalizing on existing research. To successfully leverage the Top Sector policy to stimulate CGIAR collaboration, choices must first be made about the extent to which fundamental, pre-competitive research should be integrated into Top Sector research. If such research is being integrated, there are possibilities to stimulate the involvement of the private sector in CGIAR research through its seed money instrument, and by granting extra points to CGIAR involvement in its calls for research.

THE ROLE OF DUTCH EMBASSIES

CGIAR's Consortium Leadership Team CEO Frank Rijsberman recommended for the Netherlands to strengthen their profile by focusing on some of her absolute strengths in agriculture, thereby moving herself to 'top-of-mind' for CGIAR centers when looking for research partners on a strategic level within CRPs.

When asking respondents, many of them indicated that Dutch strengths are in resource efficiency, climate smart agriculture (CSA), integral system approaches, modelling (of crop growth, land use, etc.), and participatory action research. Moreover, the Dutch have expertise in the sectors of horticulture, seeds, dairy, fish, nutrition, and low volume high value crops. Expertise on systems analysis and nutrition should be explicitly leveraged because CGIAR is lacking sufficient expertise on these areas and hence could be complemented by Dutch expertise.

There may then be a role for Dutch embassies to promote these strengths on the ground, close to CGIAR centers' headquarters. Indeed, some CGIAR respondents indicated that currently the embassies are focused mainly on stimulating trade and are

not very proactively promoting the Dutch strengths in ARD. By means of science diplomacy the Netherlands should be actively promoted as a knowledge country with specific agricultural and ARD strengths.

Embassies may moreover act as a match maker, passing on the demand for specific knowledge and expertise to Dutch parties that possess these, and preventing competition among Dutch parties and CGIAR where collaboration may be a feasible alternative.

NETWORKING DAYS

A final initiative to stimulate collaboration between CGIAR and Dutch parties would be to organize networking days, during which interested parties can meet and explore potential for complementarity and possibilities for Dutch involvement in CGIAR research or the undertaking of joint projects. Germany for instance, organizes a yearly Tropentag, which is a conference which is attended by both many German and many CGIAR researchers. Because of the excellent opportunity for these attendants to make acquaintance and learn about each other's field of expertise and research they currently carry out, a lot of collaborative initiatives are generated.

A comparable networking event is being organized by DFID. DFID ties these days to calls for research they launch. Visitors register for these calls and then meet on the Interest Day to form consortia. Albeit a set-up such as this is very demand-driven, the calls for research are still very broad.

Organizing such days will take a relatively small investment, whereas it has huge potential to facilitate collaboration. By doing so, the favorable location of the Netherlands as described before is effectively leveraged. There may moreover be a possibility to create links between such a networking day and the Food & Business Knowledge Agenda.

CONCLUSION AND RECOMMENDATIONS

After its reorganization, undertaking ARD in partnerships with external parties has become part of the mandate of CGIAR. The Dutch agricultural knowledge sector and CGIAR possess complimentary knowledge and interests in many areas and may potentially complement each other on many of the CRPs. Collaboration is interesting for both CGIAR and Dutch parties because jointly more impact can be created and fragmentation of research may be prevented. By collaborating with international partners, Dutch parties may moreover sustain its knowledge infrastructure on a high level.

A thorough assessment of collaboration between CGIAR and Dutch parties has led to the surfacing of various forms of collaboration. Albeit being criticized, among others, for being too introverted, CGIAR thus appears to be prepared and willing to collaborate with external parties. To date however, most of this collaboration was said to be informal, on individual projects, and on an ad hoc basis. When cooperation is being funded by CGIAR, these partnerships moreover are often based on one-sided dependence. Parties involved in such collaboration, especially when collaborating on a high level of abstraction, are often frustrated because of clashing working styles and high transaction costs of collaboration. Due to a lack of transparency of the CGIAR system, interested parties are moreover experiencing difficulties in finding scope for complementarity.

Through intensified collaboration with CGIAR, insight into the long term strategic research agenda of CGIAR may be increased. Moreover, fruitful collaboration may be expected to facilitate the buildup of mutual trust and common working methods, diminished transaction costs, the development of networks between the parties involved, and an increased insight into each others' field of expertise, functioning as a catalyst fueling even more, and more effective, collaboration. Parties possessing a sufficiently large budget, a large scope for complementarity, and a long-term scope, may want to opt for collaboration on a CRP level so that they may possibly strengthen their role in CRP governance and management and exhibit influence on the direction of CGIAR's research agenda. In other instances, most fruitful collaboration appears to be on a project basis.

Securing and maintaining such partnerships is for a large part the responsibility of the parties that desire such collaboration. These parties need to continuously be proactive in approaching CGIAR, in actively seeking and highlighting complementarities, and in building and maintaining a network within CGIAR. Staff exchanges, joint PhD's and postdocs, and the informal exchange of knowledge and expertise contain great promise for facilitating the establishment of cooperation. When collaborating, partners should be prepared to adapt themselves to each other's needs and ways of working. Care must moreover be taken that such collaboration remains focused on the common interest in creating impact and goals are not being perverted by a strong focus on financial compensation.

The government then, may facilitate both current and future successful and effective cooperation by targeting its policy instruments towards alleviating the main barriers and constraints to collaboration and initiation of collaboration that are currently being experienced. To overcome issues with funding, instruments such as seed or matching money, DLO funding, and competitive calls for research granting bonus points for CGIAR partnerships may be leveraged. An increased insight in scope for complementarity of research and the buildup of a network among Dutch parties and CGIAR may be facilitated through the GRA, facilitation of staff exchanges and JPO placements, organizing networking days, and by embassies practicing science diplomacy through which Dutch strengths and expertise in ARD are being stressed.

The focus on facilitation of partnerships with CGIAR should be widened beyond inclusion of research partners. Local implementation capacity is paramount for the successful application of the results of CGIAR research, which may strongly be contributed toward by NGOs. What is more, the increasing experience of the Dutch agricultural research sector with collaborating within PPPs and the Dutch Diamond offer opportunities for innovative new forms of collaborating with CGIAR. Dutch government and embassies, knowledge institutions and research institutes may act as a match maker for collaboration between CGIAR and the Dutch private sector. Private sector involvement may moreover be stimulated through Top Sector policy and policy of the Food & Business Knowledge agenda.

Especially in the current era of globalization, Dutch parties in ARD need to make sure that they retain their place in prominent ARD networks. When indeed CGIAR functioning within the CRP framework is improving and the organization is moving toward an opening up of the system, it is paramount for Dutch parties to get, and stay, involved in collaboration with CGIAR now. Collaboration is particularly paramount when it does not encompass research close to the core expertise of CGIAR. Especially in areas where CGIAR is lacking expertise, such as capacity strengthening, innovation and collaboration with the private sector, collaboration has the potential for great added value. When the Dutch government and the Dutch agricultural research sector join forces and effectively manage to get involved in partnerships with CGIAR, scope for involvement in such partnerships in the future is vastly increased.

ANNEXES

ANNEX I: OVERVIEW OF CRPs AND DUTCH CRP FUNDING

CRP 1.1	Integrated Agricultural Production Systems for the Poor and Vulnerable in Dry Areas	\$11,2
CRP 1.2	Integrated Systems for the Humid Tropics	
CRP 1.3	Harnessing the Development Potential of Aquatic Agricultural Systems for the Poor and Vulnerable	
CRP 2	Policies, Institutions, and Markets to Strengthen Food Security and Incomes for the Rural Poor	\$25,6
CRP 3.1	WHEAT-Global Alliance for Improving Food Security and the Livelihoods of the Resource-poor in the Developing World	
CRP 3.2	MAIZE - Global Alliance for Improving Food Security and the Livelihoods of the Resource-poor in the Developing World	
CRP 3.3	GRiSP - A Global Rice Science Partnership	
CRP 3.4	Roots, Tubers and Bananas for Food Security and Income	\$16,8
CRP 3.5	Grain Legumes: enhanced food and feed security, nutritional balance, economic growth and soil health for smallholder farmers	
CRP 3.6	Dryland cereals: Food Security and Growth for the World's Most Vulnerable Poor	
CRP 3.7	More Meat, Milk and Fish by and for the Poor	\$16,8
CRP 4	Agriculture for Improved Nutrition and Health	\$16,8
CRP 5	Water, Land and Ecosystems	\$11,2
CRP 6	Forests Trees and Agroforestry: Livelihoods, Landscapes and Governance	\$11,2
CRP 7	Climate Change, Agriculture and Food Security (CCAFS)	\$8,4

* All amounts stated are in millions

ANNEX II: OVERVIEW OF DUTCH IN CGIAR