Water Footprint and Competitive Advantage and Trade in the Nile Basin Countries

Inception Report

June 2011

Prepared by

PEGASYS
Strategy and Development

Table of Contents

1. Introduction

The Nile Equatorial Lakes Subsidiary Action Program, Regional Agricultural trade and Productivity Project (NELSAP RATP Project) has appointed Pegasys Strategy and Development (Pty) Ltd (Pegasys) to perform capacity building, analysis, documentation and creation of awareness on Virtual Water/ Water Footprint for comparative advantage production and trade in the nine Nile Basin (NB) countries.

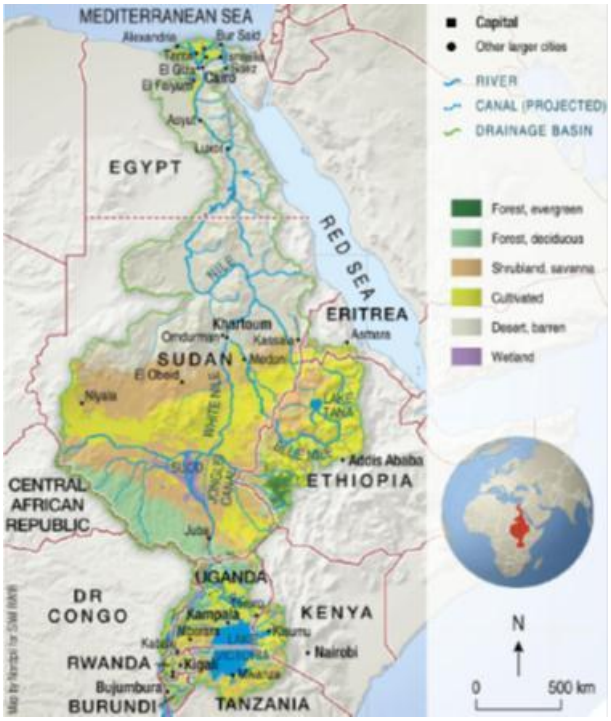
As a first deliverable, Pegasys, has produced this Inception Report. The purpose of the Inception Phase is to confirm the expectations and context for the project and clearly recap upon the agreed deliverables; developing a clear approach to completion of the project. This has assisted the project team to plan and programme the implementation of the assignment in detail and to ensure that the expectations of the client and the project team are aligned.

The Inception Report confirms and expands upon the proposed assignment approach, activities, task and deliverables, and the resource allocation.

2. Understanding of the Scope and Information

2.1 Background to the Project

The Nile Basin Initiative (NBI) through its subsidiary action program, the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) seeks to promote regional agricultural trade as a means to improve the efficiency of water use for productive agriculture. The NBI and NELSAP have identified that a key dimension in improving the efficiency of water use for production is through the use of virtual water/water footprinting to inform trade policy and strategy.



Taking account of the comparative advantage of a region/country in the production and trade of an agricultural product, can lead to economically more efficient water use. Similarly taking account of the scarcity value (opportunity cost) of water used in the production of agricultural products and comparing this to the value of those products can lead to technically more efficient use of water. A country that is water scarce may seek to export goods with lower virtual water content and import goods with higher virtual water content. Countries or regions that are water abundant are better able to produce and export more water-intensive crops.

In order to inform a trade policy discussion that encourages efficient water use, it is necessary to understand the virtual water/water footprint of the countries and regions in the basin.

2.2 Objective to the assignment

This project has two components that will support a current and continued understanding of the virtual water/ footprint of goods in the Nile Basin countries.

1. A training program will pass on the methodology and core technical know-how to participants from the NBI and Nile Basin countries. This will encourage the understanding of how to use the virtual water/water footprint concept to inform decisions, and will create the skills internally in the region so the approach may be used to answer - questions regarding footprints.
2. An analysis, documentation, and awareness creation of the virtual water/water footprint of one major exportable and one major importable for each of the 9 Nile Basin countries will highlight issues and opportunities for water savings and efficiency related to trade of agricultural goods. In addition, give sample policy options that could be referred to by the NBI Subsidiary Action Programs, Nile Basin countries, etc

These relate directly to the two stated objectives of the project, which together contribute to the purpose of the project, namely to use virtual water/water footprinting to promote improved efficiency of water use for productive agriculture and trade in the Nile Basin region.

Water footprinting is a new concept and this study has the potential to contribute enormously to the development of best practices in this area. Significant issues that will be investigated in this assignment include:

a) Water footprint concepts
b) Policy formulation by governments and agricultural development in regard to water footprints
c) The potential impact of water footprints on corporate strategy and the private sector
d) The concept of water saving through trade
e) Water dependence in respect of water footprints
f) Global Water Footprint management aspects of hot spots.

3. Project programme, management, country visits and budget

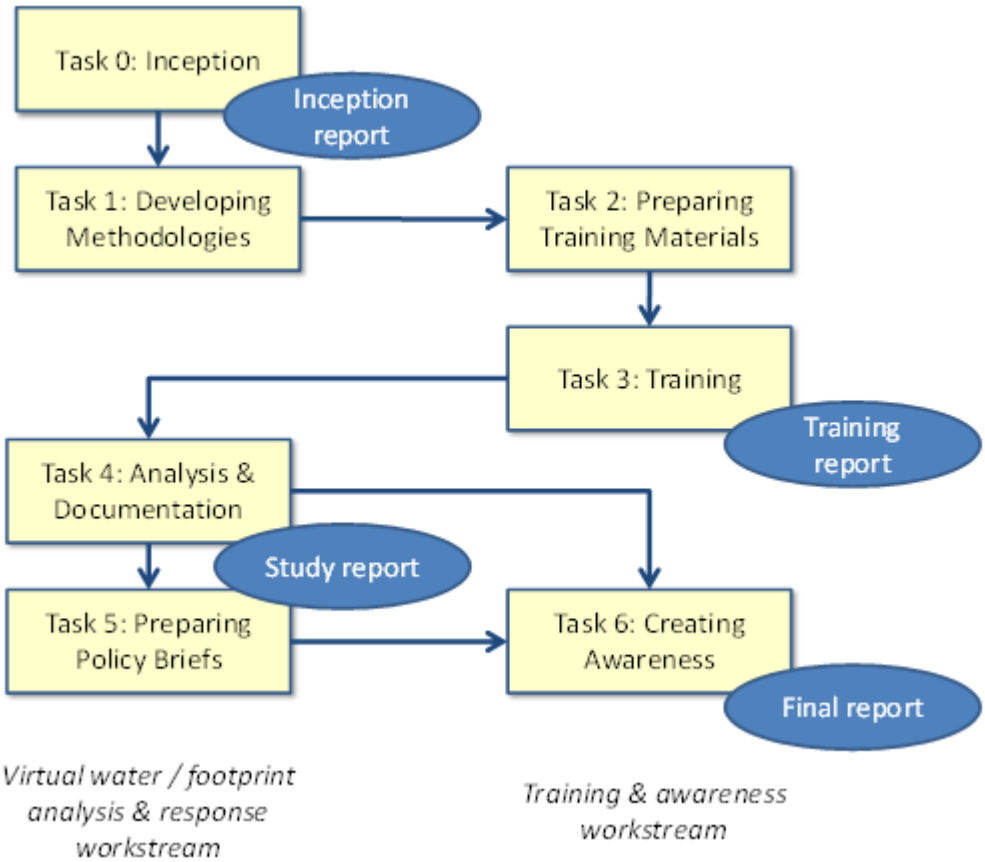
The Terms of Reference (ToR) and proposal provided a comprehensive overview of the project programme, deliverables and budget, which is largely endorsed by this Inception Report. Rather than reiterating the details of the tasks, important points of clarity are highlighted for each task.

3.1 Task Description and Deliverables

A number of tasks were identified ToR which contribute to the two specific objectives of the assignment. These objectives have been translated into the two work streams for the assignment, namely:

- Virtual water / water footprint analysis and response work stream
- Training and awareness work stream

The tasks (and associated activities) fall neatly into these work streams, as indicated in the following diagram. The discussion of tasks and activities below explains the approach and methodology for the project.



Task 1: Develop methodologies and tools

Water footprints provide an opportunity to overlay economic and social considerations onto water consumption trends, as well as the water resources situation. The water footprint approach is able to marry economic indicators with water consumption metrics and in so doing is able to provide economic value of water indicators that can be used to assist the water planning and allocation process.

However, as has been recognised by the project group, the water footprint metric is not an end in itself, but rather is a tool to assist in identifying appropriate policy and response options. Bringing together the methodologies for analysis and response provides the opportunity to develop tools and metrics that provide relevant information to engage the response questions.

Basin water footprint, impact and response is a relatively new and evolving space, with methodologies and approaches continually being adapted and extended and the central purpose of the project to improve efficiency within the platform upon which the methodologies in this task are developed. The following considerations will, therefore, guide the development of analysis and response methodologies:

- The identification of export and import products will be supported through meta-analysis of key traded commodities for each Nile Basin country, ranked or scored based on intensity of water use and current levels and future opportunity for trade of this commodity within the Nile Basin region.
- A working understanding of a coherent, consistent and high quality water-footprinting methodology will be embedded in water management and trade policy stakeholders in the region. This will support continued constructive, transparent and credible use of virtual water analysis to supplement water and trade policy discussions and decision making.
- The methodology will incorporate a sophisticated understanding of reliability, quality and provenance of data used (and its sources) and the limitations and strengths of water footprinting methodologies. These issues will be clearly demonstrated and communicated to stakeholders to guard against misplaced application.
- Compelling examples which demonstrate how the virtual water trade and water footprint analysis will be identified and generated by stakeholders and refined by the -assignment team to inform a series of high impact policy briefs. This important issue is that commodities will be selected for their illustrative (demonstrative value) across the basin, rather than their significance in magnitude of commodity or water traded. In particular, the issue of food security will be addressed within the NB countries through the analysis of one major food crop exportable and one major food crop importable.
- Response options will prioritize practical and viable win-win recommendations which support shared benefits and pro-poor improvements to domestic, regional, transboundary and international trade and water management policy. The policy response framework will follow that being developed by Pegasys in association with the Water Footprint Network.

Activity 1.1: Develop methodology and tools for analysis of Virtual Water and the Water Footprint relevant to the Nile Basin region

This activity relates to the design of the methodology that will be used to assess the sustainability of the Nile Basin Countries' water footprint from both a country and basin level perspective.

The methodology we will take will explore these following core issues:

- The distinction between water footprint and virtual water and the perspective this distinction provides on comparative advantage and the way it informs appropriate policy responses around trade and agricultural policy
- Green versus blue water footprint at a temporal and locational level
- Understanding virtual water at the point of production and how it relates to the trade in virtual water both across and outside of the Nile Basin Countries
- Understanding virtual water at the point of consumption and how it relates to the opportunity cost of production, food security and the comparative advantage between different production areas
- How the water footprint relates to water resource availability at a country and basin level
- How the water footprint relates to actual water withdrawals and water losses from evaporation (distribution efficiency)
- Whether the grey water footprint should be considered associated with salinization from irrigation return flows
- Whether water footprint of energy production (particularly evaporation losses associated with hydropower) should be assessed in terms of regional energy trade.

The assignment team will shape and fine tune the existing water footprint methodology in order that it can begin to answer the important questions relating to food, trade and water resource security across and within the basin. It is expected that the analysis would have the following dimensions:

- For exported commodities: the blue and green water footprint of the selected agricultural products must be estimated for the country and the portion of the country in the basin, with some indication of the trade into the other basin countries and out of the basin. This should be contrasted against the production of that crop within the country for domestic consumption (again, distinguishing basin from remainder of the country), to provide an indication of the relative magnitude of the exported water.
- For imported commodities: the blue and green water footprint of selected agricultural products must be estimated at the point of production (in the other country, whether this is in the basin or external), and compared to the blue and green water that would be required to produce that crop in the country of consumption (i.e. the importing country). This should be contrasted with the total consumption of that product in the country.
- The actual products to be selected should reflect both the major traded commodities in the basin countries, but should also consider the illustrative value of that crop in terms of its water impact and the nature of its agricultural political economy (including food security and market value).

Activity 1.2: Develop methodology and tools for documentation of Virtual Water and the Water Footprint relevant to the Nile Basin region

The documentation -to be prepared will distinguish between water footprint sustainability and product related response options. We will consider shared responsibility, the water risk mitigation & corporate responsibility, and the contribution to the development/improvement of national and river basin water policy.

There is currently an on-going Water Footprint Network Response Working Group that is addressing the interpretation and possibilities for response (on which Pegasys is represented), which intends to have recommendations by mid-2011. It distinguishes between (i) response related to company footprints for particular products and supply chains, and (ii) policy response related to basin and national level footprints. As we have already noted, this is a dynamic theoretical space, and there is no fully developed best practice in the area of policy response. The approach will capture the documentation and data that is available and will include interpretation and adaptation to the situation and requirements of the Nile Basin.

In line with the ToR, the document will distinguish between three broad levels of efficiency, namely: i) local level technical water use efficiency; ii) catchment level economic efficiency through water allocation; and iii) global level economic efficiency through trade according to comparative advantage. The document will reemphasise the importance of linking the water footprint analysis to the water resources and agricultural political economy and acknowledge that water, agricultural and trade decisions are made by multiple role-players in the public and private sectors for a range of water and non-water related reasons. Virtual water and water footprint is a useful metaphor to inform these policies and decisions, but should not be perceived to the determining factor in policy and response. Again, the contextualisation of these issues through the political economy of agriculture and trade will be critical to ensure appropriate and nuanced recommendations.

The methodology for water footprint sustainability will be based on the sustainability of the use of water (impact) in a particular location, which relates directly to the cumulative stress in that basin from the production of the selected commodity, as well as all other commodities. This implies that addressing the commodity in isolation may lead to misleading interpretation, and that a benchmark of the range of commodities being produced in that area/catchment also need to be considered (in understanding catchment allocative efficiency). High level perspectives on the competing agricultural, domestic and industrial demands on that water will also be considered to indicate the opportunity cost of the water used in production of the selected commodity. This benchmark will be provided through Activity 1.3, described below.

The second aspect of this task, namely the product related response options builds on the water footprint sustainability assessment and will need to identify possible responses at the local efficiency, catchment allocation and trade levels. These options may be derived from the WFN response option recommendations (from the Working Group), together with RATP2 PMU, the NBI Information System (NBI-IS) and Nile Decision Support System (Nile DSS). The extensive experience of the - team on this assignment, will be used to synthesis and expand upon these platforms to provide a coherent and comprehensive perspective and method for identifying response options for

a particular agricultural product, while considering the water resources management, agricultural political economy and trade arrangements around that product.

Finally, the concepts of water risk and shared responsibility will be brought into this discussion, both between countries and with corporate role players with risk and interest in agricultural product supply chains. The role of civil society as a facilitator of these types of engagements and partnership is increasingly being recognised. Policy is not constrained to the action of the public sector, but also the emerging field of corporate engagement around water risk and stewardship being driven by UN Compact (CEO Mandate) and World Economic Forum.

Above all, this entire methodology will be framed around the core purpose of the project to inform efficiency through virtual water / water footprint. Thus the questions that will be addressed will guide the methodology for analysis in Activity 1.1 and the methodology for response in this activity.

Activity 1.3: Develop a high level water footprint for the Nile Basin using existing studies

In accordance with the requirement (in Activity 1.2) for a benchmark of water footprint for the range of products produced and exported from a country (catchment), this activity will use a combination of existing studies, tools and the project team's expertise to scope a high level water footprint for the Nile Basin at both a country and basin level. In particular, this will include:

- WFN global water footprint and trade report released in May 2011
- WWF (Chapagain's) recent global model of the international trade of virtual water
- Zeitoun and Allen's Nile Basin water footprint study

The high level water footprint can be translated into some useful economic measures. It will be used to map out the imports and export of virtual water within and across the basin, differences in traded value per unit of water used in the production of different crops and to begin to link this to catchments of water stress.

This would be supported by a desk top synthesis of the current water resources situation in the basin, linked to future climate, growth and population scenarios to inform the sustainability assessments.

As well as developing the benchmark this activity will inform the selection of one major exportable and one major importable for each of the Nile Basin member countries, particularly to illustrate key issues that need to be addressed in the response and policy notes.

These crops will be selected on the basis that they will be able to show how water footprinting and virtual water analysis can be used to clearly articulate to the broadest possible stakeholder audience, the stories surrounding the political, economic, social and environmental challenges in the basin as and where they relate to water.

This work will primarily take place during June 2011.

Task 2: Prepare training materials/modules

Training and knowledge transfer have been placed at the core of this project. Our approach to this work will incorporate high quality training and knowledge transfer in order to empower and embed ownership of the subsequent analysis to regional beneficiaries and practitioners.

The following guidelines will be applied throughout preparation and delivery of training materials.

- **Learner-centred approach:** Our preparation will adopt a learner-centred approach which will draw on the needs, current understanding and capabilities of the target audience, and preferred learning approaches of the target audience.
- **Early consultation and pilot materials:** Understanding the preferred learning approaches of the target audience and designing effective programs will be supported by early consultation and development of pilot materials and curricula.
- **Learning by doing:** A learning-by-doing approach will be adopted to embed genuine practical and applied understanding which will see country delegates play a key role in the wider analysis including methodological review, data gathering and quality assurance.
- **Interactive online resources:** Where appropriate, interactive online resources will be developed and made available, enabling participants to prepare for training, review methodology and tools, and practice application.
- **Multiple languages:** Where desired training resources will be provided in multiple languages including English, French, Swahili and Arabic.

Activity 2.1: Prepare analysis training materials/modules

The principles above regarding accessible and participatory training guide the development of training materials on the methodology and tools for analysis of virtual water and water footprinting for participants from NBI and Nile Basin countries.

It will be particularly important to recognize the background and current understanding of the target audience, including the diversity of technical skills and familiarity with economic analysis. This will be gained through consultation with the NBI and delegates from Nile Basin countries. Training materials and modules will then be developed to meet the participants' needs.

Additionally, examples for analysis will be developed so participants can learn through application. The examples will be developed to be realistic and central to agricultural trade in the region, and will be based on the high level water footprinting analysis completed in Activity 1.3.

Activity 2.2: Prepare documentation training materials/modules

The above training and knowledge transfer principles will apply, but preparation of documentation training materials and modules will require a nuanced understanding of the political economy and local water resource issues in different regions of the Nile Basin. This is because in order to develop a learning-centred approach, including sustainability and response options, the appropriate suite of solutions to choose from must be identified.

These materials will emphasise the objectives of developing a training approach that will encourage future use and dissemination of the tools to increase water use productivity and agricultural trade, as well as the use of water footprinting to inform political economy, food security and water security policy decisions.

It will be critical to pilot the documentation training materials and modules, and to design the training to be highly interactive, as this portion of the training will have to convey a deep conceptual understanding of linkages between political, trade, food security, and water security considerations. As discussed, the recipients of the training will be both senior policy makers as well as technical analysts. The materials will be designed to distinguish between and engage the separate needs of both these groups.

The development of key messages for the training will be completed and agreed with the client by mid-June 2011.

Following this, the development of the training materials will take place during the first half of July with a deliverable date of 15th July.

Interim Deliverable: High quality training materials and approaches, appropriate and effective for the target audiences of policy makers as well as technical analysts.

Task 3: Training the NBI and Nile Basin Countries' participants

This task has three interrelated purposes:

a) communicating the analysis and documentation methodologies and tools that have been developed
b) embodying the first step in creating awareness of Virtual Water and Water Footprint concepts
c) gathering information from participants regarding agricultural commodities to analyse.

The training approach will closely follow the guidelines used in developing the training materials, namely fostering an accessible, participatory, and learning-by-doing approach. Additionally, however, the regional training session will be used as an opportunity to gather input from the participants regarding which agricultural commodities to analyse and document from each of the nine Nile Basin countries, increasing participant involvement and making the session into a two-way conversation.

As discussed, it is envisaged there will be two categories of training participants; senior policy makers and technical analysts and this element will be taken into consideration in the preparation of the training approach, for example with the implementation of specialist break out groups which have different approaches in order to deal-specifically with the needs of technical analysts as well as dealing simultaneously with the specific needs of policy makers.

Activities 3.1 and 3.2 will run in parallel. While they are integrated, each has a slightly different purpose and target audience.

Activity 3.1: Train NBI and Nile Basin countries' participants on methodology and tools for analysis of Virtual Water and the Water Footprint

The approach to training on the methodology and tools for analysis has largely been discussed above. The session will be application-based and interactive, allowing participants to work with each other to form a network of support and impetus to use the methodology and tool going forward. The particular focus of this task will be to respond- to the needs of the technical analysts who are interested in the methodologies and tools for analysis.

Also, although the training sessions will be structured based on the previously gained understanding, they will remain sufficiently flexible to accommodate diversity in background so that participants leave with a solid understanding of virtual water and water footprinting analysis.

Activity 3.2: Train NBI and Nile Basin countries' participants on methodology and tools for documentation of Virtual Water and the Water Footprint

The training session will also serve as a forum to gather input and begin thinking about which agricultural products to analyse and document. Once participants understand the analysis and documentation surrounding virtual water and water footprinting, they will be able to articulate the crops of most concern or interest. The particular focus of this task will be responding to the needs of senior policy makers (the decision makers) who will need to understand the analysis and accompanying documentation.

Again the documentation training session will emphasise how to use this tools to inform a policy decision regarding water use productivity, agricultural trade, and water scarcity and food security issues. We will also engage the participants in order to identify appropriate crops for analysis within each country.

The date for the training will be the 24th to 29th July 2011 for a period of 5 days at a venue to be confirmed with Hellen Natu.

Deliverable: Consultancy training report.

Task 4: Analyse and document the virtual water/water footprints for one major exportable and one major importable in each of the 9 Nile Basin countries

This task will provide detailed information about water footprint and response associated with the 18 selected products, in order to inform policy and awareness processes. The analysis and documentation of water footprint will follow the methodologies developed in Task 1, and be applied to the agricultural products selected and agreed through the Training Report process.

While much of this is mechanistic, the two critical aspects of this task are (i) around information acquisition from global sources (such as FAO) and national information (facilitated by the country and basin representatives), and (ii) around the synthesis and recommendation of appropriate response options.

The project team members will visit each of the countries in the study to verify the data collected on the ground. The team will also identify and use local counterparts or one local counterpart who will be able to facilitate the logistics and data collection in the Nile Basin countries.

The results of this task will feed into step two of the awareness creation process which will be to use the data collected and the resulting analysis of the virtual/water footprint in each of the 9 Nile Basin countries to build further understanding of the concepts.

Activity 4.1: Analyse virtual water and water footprint for one export and one import for each of the 9 Nile Basin countries

This activity will develop water footprints for each of the selected crops using the analytical tools developed in Activity 1.1. The two categories of crops (importables vs exportables) can be used to tell very different stories about the impact of water use in the production of crops and how they relate to the allocation of scarce water resources. We will be looking at country level and country specific data but we will ultimately be considering the impacts of water use on water policy within the basin as a whole.

The water footprint of imported crops is calculated at the point of consumption and is able to articulate a narrative about food security and comparative advantage. The critical issue is not in understanding how much virtual water is contained in a particular imported crop, but the relative footprint of producing that product in the country of consumption versus the country of production.

This understanding of what proportion the imported crop makes up of the total amount of virtual water embedded in the country's consumption of goods and services begins to introduce some political economy issues relating to the social, political and economic trade-offs of not being able to secure the particular crop's supply through international trade (as opposed to growing it domestically).

The water footprint of exported crops are calculated at the point of production. A ratio between the amount of water embedded in exported crops as a proportion of the country's total production of goods and services can be used to show the impact of exported production on local water resources. The sustainability of the water footprint emerges from these discussions.

The different stories told by these two measures can then be used to assist decision makers and water planners to influence the way in which water can be most efficiently allocated between competing users and competing policy priorities within and across the basin. These in turn may influence agricultural and trade policy frameworks.

Activity 4.2: Document response options for virtual water and water footprint for one export and one import for each of the 9 Nile Basin countries

The virtual water and water footprint metrics provide a valuable metaphor to inform and influence the linkage between water, agriculture and trade. However, it is important to recognise that it is only a metaphor that should be used to initiate a strategic dialogue around broad government (or corporate) policy and product response options. Many other factors also influence these decisions and to be effective, the presentation of recommendations needs to explicitly acknowledge this context.

However, this caveat should not distract from the critical water, agricultural and trade concepts and issues that a well-developed, responsible and appropriate water footprint analysis can present. Following the ToR, these responses need to be cast at the local, catchment and international trade levels. The process and options identified in Activity 1.2 will be used to begin this analysis, which will be done through a brainstorming and Delphi process between the –assignment's core team and strategic advisors. A robust suit of sample responses at the different levels for each product would be articulated, with a prioritisation of how they may be implemented.

Once all the product options have been explored, common themes and responses will be synthesised to provide a high level perspective on sample response options and policy interventions related to water footprint and efficiency in the Nile basin.

The date of delivery will be the third week of November 2011 and the draft will be presented for comment at the RATP Project Steering Committee Meeting in December 2011.

Deliverable: Consultancy Draft Report on analysis, documentation and awareness creation on one major exportable and one major importable for each of the 9 Nile Basin countries, including:

- Country specific chapters and detailed analysis of the selected commodities
- Issues of analysis that can inform countries facing comparative advantage/disadvantage
- Sample Response options that can inform governments about how to address water scarcity.

Task 5: Prepare policy briefs and conference fliers

The purpose of this task is to develop effective communications materials for policy implications related to water footprint analysis and response.

For awareness creation, we will produce a number of well-designed dissemination materials such as posters, fliers, t-shirts and policy brief brochures. These materials will be nuanced to different audiences ie particularly targeted for trade, water or a corporate audience.

The policy briefs to be prepared largely derive from the previous task and will concern analysis, documentation and arriving at sample response options. They will highlight that policy is relevant at international, regional trans-boundary, national, catchment and local levels and distinguish between public sector and corporate policy, linked through the concepts of shared risk.

The final step in awareness building will be the distribution of these briefs incorporating the key messages from the training and analysis in order to reinforce

Activity 5.1: Prepare a policy brief and conference flyer/posters and other materials on key issues of water foot print analysis for import and export of agricultural products in the Nile Basin countries

This policy brief must provide accessible information for public, private and civil society decision makers, leaders and technical managers. It will outline the policy implications (advantages and limitations) of water footprint analysis, together with and the needs for on-going estimation of agricultural product water footprints. This would refer to the 18 crops, as well as recommendations about possible expansion of this to other relevant crops.

The conference flyer/posters and other promotional materials will also assist the project team and regional / country representatives to create awareness around the methods and opportunities for water footprint analysis.

Activity 5.2: Prepare policy briefs and a conference flyers/posters and other materials on key response options for water foot print in the Nile Basin

While the ToR implies one policy brief and conference flyer, more than one brief (containing similar information) will be appropriate to target messages at different audiences. Again this policy brief should provide accessible information for public, private and civil society decision makers, leaders and technical managers. It will outline the policy implications (of the response recommendations, building on the water footprint sustainability assessment. This would refer to the 18 crops, but would provide a synthesis of the potential policy recommendations for agricultural production and water resources management across the region.

The conference flyer/posters and other promotional materials will also assist the project team and regional / country representatives to create awareness around the potential policies and agricultural product response options highlighted by the water footprint analysis.

Interim Deliverable: Posters (4 in total, 15 hard copies of each and a copy in PDF)], PDFs for flyers, policy brief brochures and designs for t-shirts.

Task 6: Create awareness of the virtual water/water footprint in the 9 Nile Basin countries.

The purpose of this task is to develop effective communications materials for policy implications related to water footprint analysis and response. The awareness raising and communication strategy will be developed with the full engagement of stakeholders and training participants, and will include the following approaches:

- Ensure the targeting of contextually appropriate and themed messages to further mutually agreed change objectives.
- Tailor awareness raising materials to target audiences, with piloting of materials done prior to delivery to ensure maximum impact.
- Cater to multiple languages where appropriate.
- Create interactive and innovative online/digital resources for key policy makers to test the implications of various future trade and water management scenarios and decisions.
- In addition to the targeted approach and defined presentations, we will be opportunistic in attending and presenting our findings at key regional and international meetings and events.
- We will document and promote our findings through publication of an academic paper in an internationally renowned peer reviewed journal.

Activity 6.1: Meet with and present issues and response options of analysis and documentation of virtual water to key stakeholders of the 9 Nile Basin countries

Building on the overall awareness approach above, creating awareness through local workshops will focus on contextualizing the agreed-upon messages at a regional level to the local audience's background and concerns. The key sample response options will prioritise win-win recommendations which support shared benefits and pro-poor improvements to domestic, regional, trans-boundary and international trade and water management policy.

Each meeting will consist of a Nile Basin discussion common to all workshops, accompanied by a discussion on what the issues and responses mean for the Nile Basin region of the specific country. This will allow the attendees to understand the broader regional opportunities for using virtual water and water footprinting to inform policy decisions, as well as highlight key issues specific to a country or locality identified during the country visits by the team carried out in late August and early September.

The messages conveyed will be constructed and piloted with the assistance of regional workshop participants before each meeting.

Finally, the local workshop will serve as an opportunity to further disseminate and reinforce the analysis and documentation methodology and tools among workshop participants, and to begin a discussion with stakeholders of possible next steps regarding how to use the virtual water and water footprinting methodology and tools going forward.

Activity 6.2: Prepare to present at the NELSAP/RATP Regional Project Steering Committee meeting and other possible meetings

This presentation will have two areas of focus. First, it will crystallize the key issues regarding virtual water and water footprinting analysis and response options for the Nile Basin that will be applicable for using this tool and methodology going forward. This will include a summary of the opportunities

for using the virtual water and water footprinting analytical tools to increase water use productivity, and to promote agricultural trade among Nile Basin countries.

Second, it will highlight key sample response options based on the analysis and documentation of the 18 imports and exports, and will provide specific options for the NBI agricultural agenda to present to the NBI governing bodies. These sample response options will prioritize practical and viable win-win recommendations which support shared benefits and pro-poor improvements to domestic, regional, trans-boundary and international trade and water management policy.

This presentation will be developed with the input of the NBI, and will incorporate feedback received at this point regarding the Training Report and Study Report.

The delivery date of the final report will be mid-December 2011 following feedback from the presentation given at the RATP Project Steering Committee Meeting in December 2011.

Deliverable: Consultancy Final Report which will synthesise the other deliverables, including the finalised consultancy report including stakeholder comments and perspectives on the analysis, of one major exportable and one major importable for each of the 9 Nile Basin countries, the examination of countries facing comparative advantage/disadvantage and response options that can inform governments about how to address water scarcity. The report will also provide high level perspectives on the training, the policy briefs and awareness creation process.

4. Project management

4.1 Work programme

The following table (overleaf) presents the timeframe for the project with the deliverables. This document, the Inception report, is the first deliverable.

As agreed during the contract negotiation, the project team will visit each Nile Basin country to verify and gather information and it has been estimated that the time in the field will therefore be increased from 35 days to 55 days.

Task	Activity / Deliverable	Months																																	
		May				June				July				Aug				Sept				Oct				Nov				Dec			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
0: Inception Report	**Meeting and Delivery of Inception Report**																																		
1: Develop methodologies and tools	1.1 Develop method and tools for analysis of virtual water/water footprint for Nile B																																		
	1.2: Develop method and tools for documentation of virtual water/water footprint for NB																																		
	1.3 Develop a high level water footprint for the NB region																																		
2: Prepare training materials / modules	2.1 Prepare training materials for analysis of virtual water in NB																																		
	2.2: Prepare training materials for documentation of virtual water in NB																																		
	2.3 Review of training materials with Client																																		
3: Training the NBI and NB country participants	3.1: Train participants on analysis of virtual water in NB																																		
	3.2: Train participants on documentation of virtual water in NB																																		
	Training Report																																		
4: Analyse and document virtual water of 9 imports and 9 exports in NB	4.1: Analyse one export and one import for each NB country																																		
	4.2: Document one export and one import for each NB country																																		
	Consultancy Study Report																																		
5: Prepare policy briefs and conference flyers	5.1: Prepare policy brief and conference flyer/posters on key issues of analysis of virtual water of imports/exports in Nile Basin																																		
	5.2: Prepare policy brief and conference flyer/posters on key issues of documentation of virtual water of imports/exports in Nile Basin																																		
6: Create awareness of virtual water in NB countries	6.1:Present issues and response options to key NB stakeholders																																		
	6.2 Prepare to present at NELSAP/RATP Regional Project Steering Committee																																		
	Final Report																																		
Progress reports																																			