

Filling the inter-generational gap in knowledge on Agricultural Water Management: twinning Junior and Senior Experts

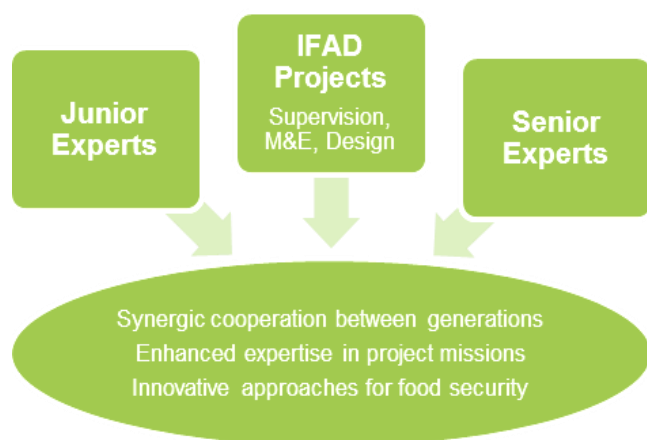
The Jr/Sr twinning

The Jr/Sr twinning project is a multi country mentoring initiative developed aimed to create **learning/sharing spaces** where junior experts in Agricultural Water Management (AWM) twin in the field with experienced senior professionals. Generating a **knowledge exchange** between generations that will lead to innovative approaches in water and agriculture, the projects seeks to strengthen skills and give visibility to a new generation of AWM professionals.

The **day-to-day implementation of IFAD-sponsored projects** represents an exceptional training ground for young talents willing to pursue a career in the AWM sector. The Jr/Sr twinning has opened up that space to a restricted number of promising AWM experts giving them the opportunity to collaborate with the Project Management Units (PMUs) under the mentorship of senior experts. If successful, such PMUs may then proceed to hire the services of the new generation of young AWM experts.

Project objectives

- Giving visibility to young professionals from the South
- Sharing ideas to improve water management in agriculture
- Bridging generations to develop two-way field-oriented knowledge



The INNOVATIVE approach of the Jr/Sr twinning

The IMI

The Jr/Sr twinning project was developed in the context of IFAD's **IMI: Initiative for Mainstreaming Innovation**. The IMI seeks to enhance IFAD's capacity to promote innovations that will have a positive impact on rural poverty: testing new methodologies to respond to **old and new challenges** with **new solutions**.

The IMI has recognized and endorsed the need to invest in knowledge development for young professionals from the South as a powerful way to locate, share, enrich and develop valuable **AWM expertise**. Targeting those early career professionals, who represent the **next generation of actors of change**, is investing in the future of water&food security.

The project at a glance

TOTAL COST	USD195.000
SPONSOR	Rudolph Cleveringa (originator) Federica Franco (coordinator)
DIVISION	PTA Water Desk
DURATION	16 months (June 2012 - September 2013)
COUNTRIES	WCA Burkina Faso, Ghana, The Gambia ESA Ethiopia, Malawi



Some pictures from the training in AWM held in Ethiopia in May 2013

How is the Jr/Sr twinning structured?

Maximizing the learning experience and the synergic cooperation

The Jr/Sr twinning project wants to give promising young professionals the opportunity to contribute to the activities of IFAD-sponsored projects, through sharing their existing knowledge and skills set under the mentoring of senior experts. In concrete terms, the project allows Junior Experts to join the PMUs as coached members, and work at two levels:

- The **development of a personal mini-project** that allows them to add a value to the 'business-as-usual' of the PMUs, and offers the opportunity to conduct research on a topic that matches their technical background and aspirations.
- The support to **day-to-day implementation of the project**, carrying out specific work packages and deliverables assigned by the PMUs.

In order to tailor the twinning on the needs and expectations of each Junior Expert involved, the IMI project asks all participants to carry out a **Personal Development Plan (PDP)**, a self-assessment exercise that helps them to map out an ideal career plan responding to their personal values, ambitions and skills, and guides them to come up with a concrete action list. The PDP seeks to enable Junior Experts to identify **opportunities** and **career options** that most resonate with them, and to contextualize them in the 6 months long IFAD loan project they have been selected for. Questions include:

How can you use the project to get closer to your objectives? What skills you need to strengthen to attain your career goals? How can the current possibility to work in an IFAD sponsored project being mentored by a senior AWM expert help you to achieve what you want?

This way, the PDP seeks to customize the learning journey on the characteristics of each participant, and to establish a common ground between the needs of an IFAD-sponsored project and the respective Junior Experts' ambitions.



Jr Experts, Sr Experts, PMU staff, IFAD representatives and project beneficiaries in Burkina Faso

A win-win scenario for all the actors involved

Overall, the Jr/Sr twinning project is a win-win exercise for all: the **Junior experts**, direct beneficiaries of the twinning project, the **PMU**, "hosting" and providing a training ground for these young professionals, and the **Senior Experts**, offering a tailored guidance and supervision. On the one hand Jr experts have the chance to strengthen their existing knowledge of project management, AWM, and broadly speaking the development practice; on the other hand the PMU can benefit of an enriched project team in the implementation of its activities, and integrate the new perspectives and innovative approaches of promising Jr Experts in its business as usual. At the same time mentoring has the potential to build bridges and understanding between the old and the young, generating a two-fold capacity building network where also experienced Sr Professionals can achieve positive changes.

Voices

Q: What are the biggest difficulties for Jr Professionals in Ghana/West Africa when they finish their studies and enter the world of work?

"The difficulty is about the possibility to get opportunities to value their skills, thus allowing them to have job practical experience." (Ousseni)

"The greatest difficulty encountered by young professionals [...] is the lack of practical expertise and technologies needed in the job market. This makes them lack strong analytical and problem solving skills." (Emmanuel)

Q: Do you think a field-based mentoring project is an effective methodology to fill the intergenerational gap in knowledge? Where is its value added?

"The mentoring helps to shape positive changes in knowledge, attitudes, skills, and ways of doing things based on an interactive communication between mentor and mentee and on field assignments." (Ousseni)

"The Jr/Sr twinning promotes innovative learning and gives exposure to promising Jr Experts, allowing their expertise to be recognized" (Kaba)

"The Jr/sr twinning allows Jr Experts to perform tasks that in the traditional work experiences wouldn't be easily assigned to them" (Alberta)



From the left: Roy Ayariga (Coordinator of NRGP), Ousseni Kinda (Junior Expert), Emmanuel Amoakwah (Junior Expert), Hon. Clement Kofi Humadour (Minister for Food and Agriculture), Alberta Asante (Junior Expert), Maurice Tanco Abisa-Seidu (District Director of MoFA), and Cuthbert Kaba Nabilse (Junior Expert)

Ghana

IFAD-sponsored Project

Northern Rural Growth Programme (NRGP), Tamale

Junior Experts

Ousseni Kinda: 28, M.Sc. Development Practice, focusing on M&E

Alberta Asante: 28, M.Phil Agricultural Economics, focusing on gender and AWM

Kaba Nabilse: 27, B.Sc. Agriculture Technology, focusing on environment and AWM

Emmanuel Amoakwah: 31, M.Sc Physical Land Resources, focusing on soil quality

Senior Experts/ Mentors

Saa Dittoh: Rural Agric/Development Economist at the University of Development Studies in Tamale (Ghana)

Kwabena Boateng: Senior Rural Infrastructure Engineer (NRGP)

The Jr/Sr twinning started in February 2013. Being it an extremely dynamic and diverse group, the Juniors have been able to benefit from peer learning. Everyone has developed a personal mini-project and an ad-hoc fund for field excursions has been created in order to better support travels to project sites for data collection. The Juniors will start implementing their research projects in the next weeks. After a mid-term review in early May, the Juniors have begun the second phase which will end in August.



Clockwise from top left: the Junior Experts with their Senior Mentors Saa Dittoh (in green) and Kwabena Boateng (in grey); the Junior Experts visit the Nabugu Demonstration Plots; Alberta works with farmers on the Nabugu Plots; Alberta and Kaba.

Personal mini-projects

ALBERTA

Project title: *"Impact of NRGP Activities on female irrigation beneficiaries in Northern Ghana"*

Objective: to Identify the various farmers' organisations involved in irrigation amongst NRGP beneficiaries, the percentage of female farmers, and the factors influencing the adoption of the different technologies.

KABA

Project title: *"Assessing the potential for dry season irrigated farming in Northern Region of Ghana"*

Objective: to assess the economic activities undertaken by farmers during the dry season of the year, and the use of

water bodies and farmlands, to evaluate the impact of land tenure systems on dry season irrigation farming.

EMMANUEL

Project title: *"Geostatistical assessment and mapping of soil and irrigation water suitability for crop production in selected NRGP project sites in Northern Ghana"*

Objective: to determine the soils prevalent in the project areas and provide the basic physico-chemical information for effective and efficient soil management.

OUSSENI

Project title: *"Measuring results of irrigation projects: results from the NRGP"*

Objective: to collect key data, and evaluate the impact of irrigation infrastructures in target communities.

Voices

Comparing with traditional trainings and internships, what's the value added of a Jr/Sr twinning?

"With the Jr/Sr twinning we have the chance to see directly the reality of the field and of the development practice. As we have to find practical solutions to practical issues, this experience allows us to understand the limitations of relying solely on theoretical decisions. The program is like a football team with his coach.. If the coaching is well you can win the match." (Idrissa)

"The good thing about the Jr/Sr twinning is the fact that it allows us to better understand how a project is managed and to evaluate an intervention in the light of the beneficiaries' needs." (Bio Mohamadou)

Personal mini-projects

IDRISSA

Project title: *"The irrigation water quality in the areas of intervention of PIGEPE"*

Objective: to determine the different sources of agricultural water pollution and to propose solutions to minimize their effects.

BIO MOHAMADOU

Project title: *"Sustainable management of hydraulic facilities for irrigation in the PIGEPE intervention area"*

Objective: to shed light on the socio-economic dynamics characterizing farmers' ownership of irrigation infrastructures



Bio Mohamadou Torou (blue/grey shirt) and Idrissa Ouedraogo (white shirt) with farmers' representatives and the PIGEPE M&E Officer during a visit of a Jardin Maraichier

Burkina Faso

IFAD-sponsored Project

Projet d'irrigation et de gestion de l'eau à petite échelle (PIGEPE), Gaoua

Junior Experts

Bio Mohamadou Torou: 33, Ph.D. Natural Resource Management

Idrissa Ouedraogo: 25, M.Sc Applied Biological Sciences

Senior Expert/ Mentor

Olufunke Cofie: Senior Scientist, International Water Management Institute (IWMI), Volta Basin Leader, CGIAR Challenge Program on Water and Food (CPWF)

The Jr/Sr twinning started in February 2013. Since the beginning of the project, both Idrissa and Bio Mohamadou have been sharing their time between the commitments of the twinning and their Ph.D studies in Ouagadougou. Among the various activities that have seen them directly involved, in May Bio and Idrissa have had the chance to participate actively in IFAD's supervision mission on the PIGEPE project, contributing to the preparation of preliminary surveys of the intervention areas and joining the field excursions. Similarly to what was done in Ghana, in early May a mid term review has helped the IMI coordination to refine the twinning methodological approach according to the needs of the different actors involved (Jr Expert, Sr Expert and PMU). A redefinition of the activities and roles is currently underway. The Juniors will be provided with a small fund for field missions to co-finance their frequent travels to the project sites, this will allow them to be fully operational in the implementation of their mini-project. The project is scheduled to end in August.

Voices

What are your interests in the Jr/Sr twinning project?

"My interest lies mainly in the beneficial impacts of collaboration between experts to solve agricultural problems. I believe a synergy of efforts will do a lot in solving the day to day constraints that hinder the agricultural sector to develop further in The Gambia. Networking with different AWM professional is also something important that the Jr/Sr twinning can offer me." (Ismaila)

Personal mini-project

ISMAILA

Project title: "Country wide monitoring and evaluation of manually constructed dykes and bridges"

Objectives: to assess if the manually constructed dykes and bridges are constructed according to the required standards set by PIWAM, to evaluate if and how they actually ease up movement to and from the farms, to determine on what aspects villages/beneficiaries need further assistance and give recommendations with regards to potential improvements.



The Nema footbridge in Pakaliding, under construction

The Gambia

IFAD-sponsored Project

National Agricultural Land and Water Management Development Project (NEMA), formerly Participatory Integrated Watershed Management Project (PIWAMP), Banjul

Junior Expert

Ismaila Mbenga: 33, M.Sc Crop Protection/Entomology

Senior Expert/ Mentor

Ebrima Sonko: Engineer, Land and Water, and Environment Specialist (NEMA)

The Jr/Sr twinning in The Gambia started in April 2013. Ismaila is a pest management and plant pathology expert working at the National Agricultural Research Institute (NARI) of The Gambia. The first month of the project has been dedicated entirely to preparatory activities for the mentoring. Ismaila, together with his senior expert and other PMU staff members, has visited several intervention sites in order to get familiar with the project's activities and be able to develop an action plan. The personal mini-project has been now finalized and its implementation started in mid-May. The first phase of the twinning will end in late early July. According to the results of the mid-term review, Ismaila may be offered to extend the twinning for 2 more months until the beginning of September.

Voices

What has motivated you to join the Jr/Sr twinning project? What are you passionate about?

"I am eager to expand my intellectual frontiers in the pursuit of a greater understanding of critical and challenging issues that influence livelihoods in Ethiopia. My academic background in Law, has enabled me to develop a critical understanding of water governance for development and sustainability. I would like to keep researching this area, and to focus on the participation of women in decision making processes and leadership roles in small scale irrigation management." (Fethia)

"I have always been interested in designing and developing integrated decision support systems and tools for land and water management. I am particularly passionate about the application of hydro informatics in utilizing L&W in a sustainable way. My country needs talented professionals who can responsibly and skilfully elaborate strategies for integrated natural resource management: I want to be recognized as one of these citizens, as a future actor of change." (Selam)

"I want to work on how to use the integrated watershed management approach to develop agricultural water: how can we create life-supporting water balance in a sustainable way?" (Mastewal)



The Junior Experts and the Senior Mentor during a field excursion organized on the occasion of the training in Advanced Agricultural Water Management held in Adama

Ethiopia

IFAD-sponsored Project

Participatory Small-scale Irrigation Development Programme (PASIDP)

Junior Experts

Fethia Ahmed: 24, LLB with Laws

Selam Belay: 29, M.Sc. Water Science and Engineering with Hydroinformatics

(Mastewal Ejigu Ademe: 40, M.Sc. Water Management)

Senior Expert/ Mentor

Mawira Chitima: Agricultural Investment Planning Specialist

In Ethiopia the Jr/Sr twinning started in May 2013. Differently from what has been organized in the other countries, here the project started with an intensive course for a broader audience. 7 young professionals were selected to participate in a 10 days long training in AMW. The training was held in Adama by Mawira Chitima and covered a broad set of topics, trying to introduce trainees to what it means to be an AWM Professional nowadays and to the skills and competencies that are key to build up a successful career as a water expert. With both class-based and field-based sessions, the training was conducted in a dynamic, informative and motivational style and overall it was extremely well received. At the end a participatory peer assessment exercise was put in place to select the best candidates. Fethia Ahmed and Selam Belay were unanimously elected as the winners of the first phase and will now spend the next 3 months working on two research projects for the IFAD Country Office, under the mentoring of Mawira. The project is scheduled to end in September.

Voices

What has motivated you to join the Jr/Sr twinning project? What significant skills do you wish to learn?

"I have little experience in working with the communities but I have a strong academic background in irrigation and drainage. I wish to fill this gap and to advance my skills in transferring knowledge related to AWM technology to rural farmers" (Mphatso)

"I would like to strengthen my skills in agriculture and natural resources management in the context of a broad rural development project, interacting with local communities to develop a demand driven approach to AWM" (Marnet)

"With the Jr/Sr twinning project I would like to learn more about water efficient technologies and crops. [...] In my near future I envision myself working on AWM in a well-established international organization as IFAD. I want to grow with an organization where I can continue to learn and contribute with my desire to make the difference" (Violet)

"I want to work on my M&E skills while sharing my existing competencies in computer software for the design of irrigation infrastructures" (Eshiperancar)



Clockwise from top left: Marnet (in pink) and Violet (in blue) during a field inspection in the Chiradzulu district; two pictures from the RLSP project sites (sub-components: water and irrigation development, natural resources and environmental management); Marnet, Eshiperancar, Violet (Junior Experts) with Andy Mbozi (Senior Expert)

Malawi

IFAD-sponsored Project

Rural Livelihoods and Economic Enhancement Programme (RLSP), Blantyre

Junior Experts

Marnet Shaki Ngosi: 27, B.Sc. Natural Resources Management

Eshiperancar Kampini: 26, B.Sc. Irrigation Engineering

Violet Moyo: 26, M.Sc. Environmental Science

Mphatso Malota: 28, M.Sc. Engineering with Irrigation and Drainage

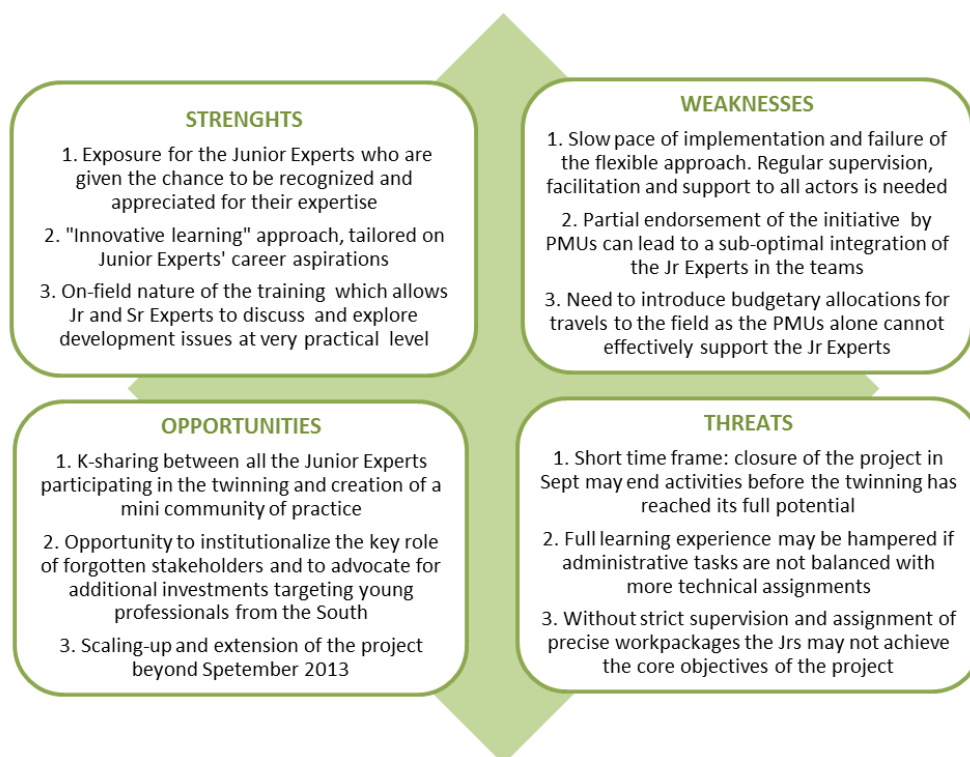
Senior Expert/ Mentor

Anderson Mbozi: Irrigation Engineer, Ministry of Water Development and Irrigation

In Malawi the Jr/Sr twinning project started in late April. The Juniors' team is a successful example of gender participation as three out of the four experts are young ladies. The first month has been entirely dedicated to getting an in-depth understanding of the RLSP project and to mapping out an action plan for the next months. The Juniors have carried out literature reviews and reading assignments on the IFAD-sponsored project, and have had the opportunity to visit several project sites, getting a good exposure to water management projects in the Chiradzulu and Blantyre Districts. The rest of the time has been dedicated to refining their personal mini-project proposal whose implementation will start in the upcoming weeks. Juniors have also started to contribute to the daily activities of the PMU, being assigned outputs and work packages. Positive feedbacks have been shared since the first weeks of the Jr/Sr twinning. The project is scheduled to end in September.

What is working and what is missing: work in progress

The Jr/Sr twinning is work in progress. Being a pilot mentoring initiative, the project has been developed with the aim of **testing a methodology** and demonstrating that mentoring is an effective means in filling a serious K-gap in AWM. In this sense it can be already considered a success: bringing to light the **enormous demand** for initiatives of this kind in most developing countries, the project itself is filling a gap in traditional labor markets that do not offer opportunities for capacity building for early career professionals. Thanks to the mid-term reviews, the weekly reports, and the efforts made to build up a culture of transparency between the beneficiaries and the IMI coordination, the Jr/Sr twinning is trying to develop an **effective modus operandi that fully responds to the needs of the target beneficiaries**.



A SWOT analysis realized with the feedbacks from Junior Expert, Senior Experts and PMUs

Some lessons learned.. so far

- **COOPERATION IS VITAL:** ...along the full management chain. A spirit of mutual trust and K-sharing is crucial to generate synergies at all levels. A cross cutting project as the Jr/S twinning can offer an invaluable opportunity to explore new ways of bringing together different actors, and ensure a participatory and coherent project development.
- **VOICES MATTER:** "forgotten stakeholders" know what they want and how. Giving them the possibility to decide for their own journey is achieving bigger impacts.
- **WHERE INNOVATION MEETS PRACTICE:** young professionals have shown to be in the key position to build up links between the research domain and the reality of the ground, between policy making and local needs, as they are uniquely equipped with technical knowledge and deep understanding of the socio-economic context.

What's next?

All the countries involved in the project are scheduled to finish the Jr/Sr twinning between August and September 2013. As a closing event to formally round off this pilot mentoring initiative, from Sept. 29th to Oct. 3rd all the participants will be invited to attend the **First World Irrigation Forum** in Mardin, Turkey. The event is organized by the International Commission on Irrigation and Drainage (ICID) in partnership with FAO, IWMI, ADB, IFPRI, WB among the others. 14 Jr Experts and their 5 Sr Mentors will gather and meet each other for a week of knowledge sharing, networking, and reflections on the way forward.

For this occasion IFAD is organizing a **side event on inter-generational cooperation and capacity development for water and food security**. The event will represent an excellent platform to capitalize on this favourable momentum, advocating the solutions that have been successfully applied to stimulate further policy dialogue.



Beyond the Jr/Sr twinning

Scaling up the model

One of the main objectives of the Jr/Sr twinning is to generate a discussion and raise awareness around the need to invest in inter-generational cooperation as a powerful and effective means to improve water management in agriculture, and to guarantee its **continuity** and **sustainability**. Such debates are needed in IFAD (PMD/HR), and around the projects (PMUs, Universities, Education Center, etc.)

There is a great need for innovative initiatives that target young and talented Junior Professionals from the South. Stimulating Knowledge sharing around incentives and reward systems to nurture a new wave of young AWM experts is becoming increasingly important especially in consideration of the progressive **erosion of professional staff and senior staff**, and the change in age structure. At aggregate level, in the last years a new pool of young AWM experts has progressively tilted towards seniors with a pronounced scarcity of middle-age AWM professionals to pass on the baton. If this gap is not filled, the quality of future AWM interventions could be at jeopardy, as junior professionals simply do not yet master the many aspects of AWM.

Investing in young AWM talents and enabling them to build up a career is also a way to intervene effectively in African labour markets for youth, where very often employment is quality constrained: work is available but not of a high quality. Today's people in Africa are more numerous and better educated than ever before. Continuous and more decisive efforts are needed to address obstacles hindering the demand for labour, while at the same time helping young people to obtain the skills to succeed.



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Who has collaborated with us?

Several universities, research centres, professional networks and other organizations have collaborated with the Jr/Sr twinning project supporting and giving visibility to this mentoring initiative

- **Agrinatura/Agrismundus** (Prague, Paris)
- **UNESCO-IHE** (Delft, NL)
- **Makerere University** (Uganda)
- **University Water Sector Partnership** (Ethiopia)
- **2ie** (Burkina Faso)
- **KNUST** (Ghana)
- **University of Development Studies** (Ghana)
- **CapNet** (South Africa)
- **Imawesa** (ESA)
- **YPARD** (Global)
- **International Water Management Institute (IWMI)** (Sri Lanka)
- **Stockholm International Water Institute (SIWI)** (Sweden)
- **MetaMeta** (NL)