

Council for Tropical and Subtropical Agricultural Research

ATSAF - CGIAR++ Junior Scientists Program Final Report

Name of student: Asliddin Bobocholov

University: Humboldt University Berlin

Supervisor at University: Prof. Sonoko Dorothea Bellingrath-Kimura, Dr. Ahmad Hamidov

International Agricultural Research Center: International Water Management Institute (IWMI)

Country: Uzbekistan

Supervisor at IARC: Kakhramon Djumaboev

Start and end date of stay at IARC: -

Start and end date of remotely supervised project: 01 May 2020 - 30 Oct 2020

Title: Exploring the interlinkages between water and energy use in the irrigated agriculture of Uzbekistan

Funded by the German Federal Ministry for Economic Cooperation and Development (BMZ)





Table of Contents

Acknowledgment		. 2
	Introduction	•
1.	Introduction	. 3
2.	Reflection on the internship	.4
3.	Conclusion	4
4.	Appendices	

Acknowledgements

First and foremost, I would like to thank Prof. Sonoko Dorothea Bellingrath-Kimura and Dr. Ahmad Hamidov to have given me the opportunity to realize this research under their supervision. Furthermore, my special gratitude goes to the ATSAF and IWMI team who supported me during the research over the course of six months. Their constant advice, particularly from Kakhramon Djumaboev provided valuable feedback. For the expert interviews with representatives of ministries of Uzbekistan and academics, Tukhtamuod Dr. Atakulov, Prof. Abdulkhakim Salokhiddinov, and colleagues at the Tashkent Institute of Irrigation and Melioration (TIIM) were of great help. Furthermore, I am very grateful to the 18 participants of the expert interviews and to those people who not only warmly welcomed me in IWMI team but made the primary and secondary data analyze possible through their constant support. The internship was made possible with the generous financial support of the ATSAF -CGIAR ++ Junior Scientist Program. Finally, this research would not have been possible without the continuous and tireless support of Sarah.

Introduction

The International Water Management Institute's (IWMI's) official started in Central Asia began in 2001 with the opening of a subregional office in Tashkent, Uzbekistan, to oversee its research activities. Since then, IWMI's work has concentrated on addressing some of the key water management issues facing the region. While carrying out its work, IWMI collaborates closely with the ministries, local water management authorities, farmers, nongovernmental organizations (NGOs), other CGIAR centers and donor-funded projects. In particular, IWMI's research in the region focuses on identifying best practices for saving water, improving irrigation performance, reversing trends in land degradation and salinity, and contributing to the development of effective water resource institutions. In the past, IWMI was also active in developing transboundary dialogue on two pilot rivers shared by three states: Kyrgyzstan, Tajikistan and Uzbekistan.

During 2001 and 2002, IWMI established its formal partnerships with the International Center for Agricultural Research in the Dry Areas (ICARDA), Scientific Information Center of the Interstate Commission for Water Coordination (SIC-ICWC), the Central Asia chapter of the Global Water Partnership (GWP), and the Tashkent Institute of Irrigation and Melioration (TIIM).

IWMI also maintains close relationships and collaborations with other important development partners in the region, such as the Asian Development Bank (ADB), World Bank (WB), Swiss Agency for Development and Cooperation (SDC), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and others. Such relationships are maintained through regular donor coordination meetings, joint field missions, various focused meetings, workshops and roundtables to discuss issues facing the region.

Description of the internship

While I was an intern at IWMI, I have gained the skills to apply the WEF nexus concept and improved my understanding of its operationalization in irrigated agriculture. During the internship period, it gave me an opportunity to collect primary and secondary data for my Master's thesis. Due to the COVID-19 pandemic situation, I was not able to travel to Uzbekistan and instead, I conducted online interviews with 18 WEF experts in Uzbekistan. I applied Atlas.ti software to analyze all my interviewed data.

During six months with IWMI team, I feel I was able to learn as much as I could. I developed my research skills how to do literature review, communicate with farmers as well as government members, and analyze primary and secondary data.

The internship has successfully introduced me to the science. I realized that I needed to develop confidence in research skills. I will consider on what my supervisors have mentioned above and will work on them with my heart.

I think internship at IWMI has provided a good opportunity for me to enhance and deepen my knowledge on WEF nexus concept and it's operationalization in irrigated agriculture. During the internship period I consulted with Kakhramon Djumaboev when required and provided informative summaries of progress. I worked very hard to accomplish planned tasks and conducted online interviews with key stakeholders in Uzbekistan. I have transcribed all interview data and analyzed using the Atlas.ti software. My major strength is in the area of institutional analysis and resource economics. I applied research methods and tools to understand interrelated or nexus issues and tries to provide scientific solution. I am in the process of finalizing my Master thesis. I am an early career researcher, motivated and planning to do his Ph.D. after completion of my Master's program.

Conclusion

I believe I learned a lot from my supervisors Kakhramon Djumaboev at IWMI, as well as Prof. Sonoko Dorothea Bellingrath-Kimura and Dr. Ahmad Hamidov from Humboldt University in Berlin. I would like to thank them to have given me the opportunity to undertake this research under their supervision.

November 04, 2020

TO WHOM IT MAY CONCERN

This is to confirm that Mr. Asliddin Bobocholov was hosted and served as an intern at International Water Management Institute (IWMI) under ATSAF - CGIAR++ Junior Scientist Program from 01 May 2020 to 30 October 2020. During this program he was supervised by Mr. Kakhramon Djumaboev - Researcher - Water Management.

Asliddin's main tasks during his assignment with IWMI included;

- Understand the WEF nexus challenges in Central Asia through literature review and interviews with IWMI Central Asia office experts. Identifying their scientific and practical experiences on what they have researched, found out, and done until now;
- Participate in their current projects and supporting them with field data collection;
- Apply different methods, such as GIS, R, STATA and Atlas.ti to analyze the research problems;
- Identify the significance of the WEF linkages and their impacts on water allocation;
- Collect necessary data in the case study areas related to location, irrigation systems, lift irrigated areas, crop types, water allocation, institutions, and existing governance structures;
- Discuss and interview WEF experts in Tashkent. Field trip to Kashkadarya province to meet with local resource users and conduct interviews with them as well as visit the pumping station areas;
- Draft project report on WEF linkages and their impact on water allocation in the lift irrigated areas;
- Complete master thesis on exploring the Interlinkages between Water and Energy Use in the Irrigated Agriculture of Uzbekistan.

We thank Asliddin for the contribution made towards IWMI's objectives and wish him well in his future endeavors.



Anne Heese

Head of Human Resources







Tropentag 2020

Food and nutrition security and its resilience to global crisis



Certificate of Attendance

This is to certify that

Asliddin Bobocholov

from

Humboldt University of Berlin Integrated Natural Resources Management, Germany

has participated at the

Tropentag 2020
9 - 11 September 2020
Virtual Conference

16 September 2020 ATSAF e.V., Germany

For the organizing committee

Prof. Dr. Folkard Asch ATSAF e.V. board

tolland Bal

Dr. Christian Hülsebusch ATSAF e.V. board