

Contributing to food security challenges by improving the quality of education – the experience of TIAME-NRU



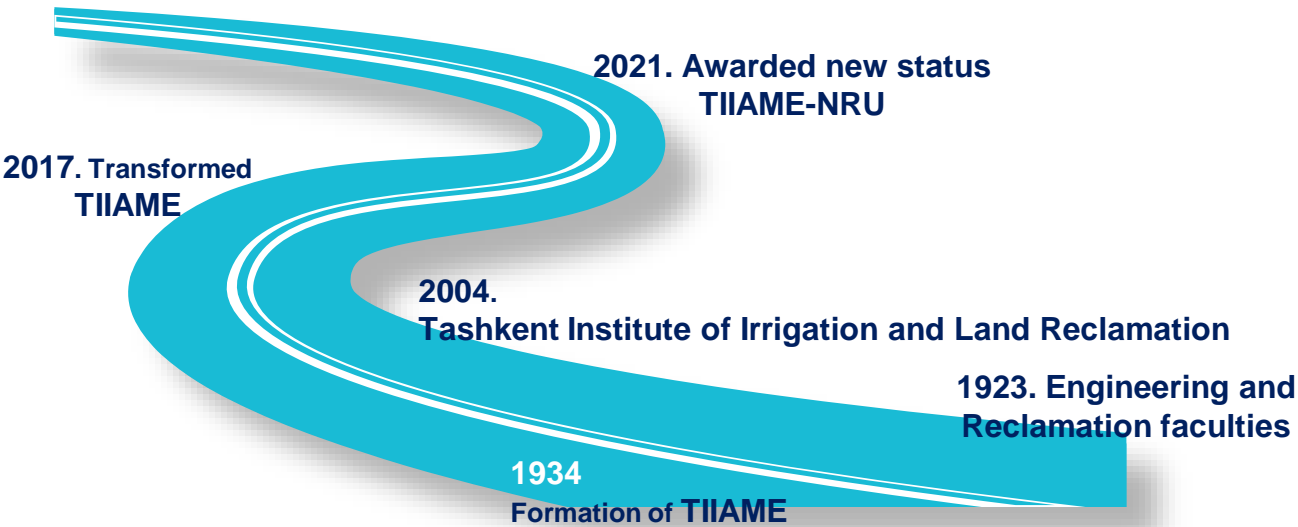
TIAME-NRU is a first-class recognized academic and research university known for its leading programs in Engineering (irrigation, water resources, environment, energy and automation, agriculture, etc.), Natural Sciences, Land Management, Agricultural Economics and Management with almost 100 years of tradition.

B.Mirzaev, Rector

A.Salokhiddinov, Vice-Rector

March 1, 2024

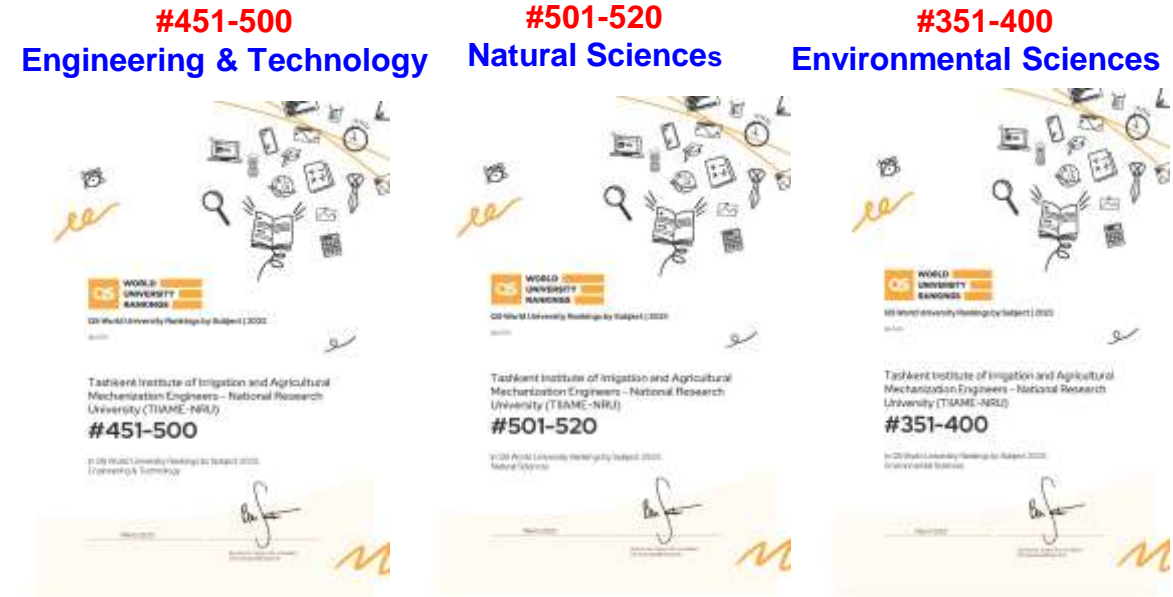
History of the University



Structure of the University

- **Головной кампус в г. Ташкент:**
 - ❖ 7 факультетов: 5605 национальных и 210 иностранных студентов, 743 преподавателя
 - ❖ Учебно-исследовательское хозяйство
 - ❖ Институт фундаментальных и прикладных исследований
 - ❖ Академический лицей
 - ❖ Техникум
- **Бухарский институт управления природными ресурсами:**
 - ❖ 3 факультета: 1587 национальных и 13 иностранных студентов, 129 преподавателей
- **Каршинский институт ирригации и агротехнологий**
 - ❖ 2 факультета: 1703 национальных и 21 иностранный студент, 138 преподавателей

Rankings of the University



National Ranking of the Republic of Uzbekistan 1

QS Asia University Rankings: Central Asia 9

QS Asia University Rankings 249

Greenmetrics 603

INNOVATIVE APPROACH

Organization of the educational process

Focused on fundamental scientific and practical training to improve the skills and knowledge of students in selected areas of specialties

- ❖ Formation of curricula and programs of disciplines taking the requirements of integration in the "Science-Education-Production" system into account
- ❖ The balance of theoretical knowledge and skills
- ❖ Modernization of the laboratory and technical capacity
- ❖ Internationalization of programs, staff, and students
- ❖ Advanced research, professional staff, and an innovative ecosystem
- ❖ The "5+1" system, branches of profiling departments at enterprises
- ❖ Joint classes and centers with advanced enterprises are mutually beneficial situations



40 Bachelor's degree programs

- ❖ Water Sector and Land Reclamation
- ❖ Water Supply Systems Engineering
- ❖ Hydrotechnical Constructions
- ❖ Agricultural Mechanization
- ❖ **Innovation Technology and Remote Sensing**
- ❖ **Mechatronics and Robotization**
- ❖ **Artificial Intelligence**
- ❖ **Information Systems and Technologies**
- ❖ **Mechanics and Mathematical Modeling**
- ❖ **Jurisprudence (transboundary water relations)**
- ❖ **MBA**
- ❖ **Energy and Renewable Energy Sources**
- ❖ Economics
- ❖ Land Management and Land Cadaster
- ❖ Ecology and Environmental Protection (in water sector), etc.

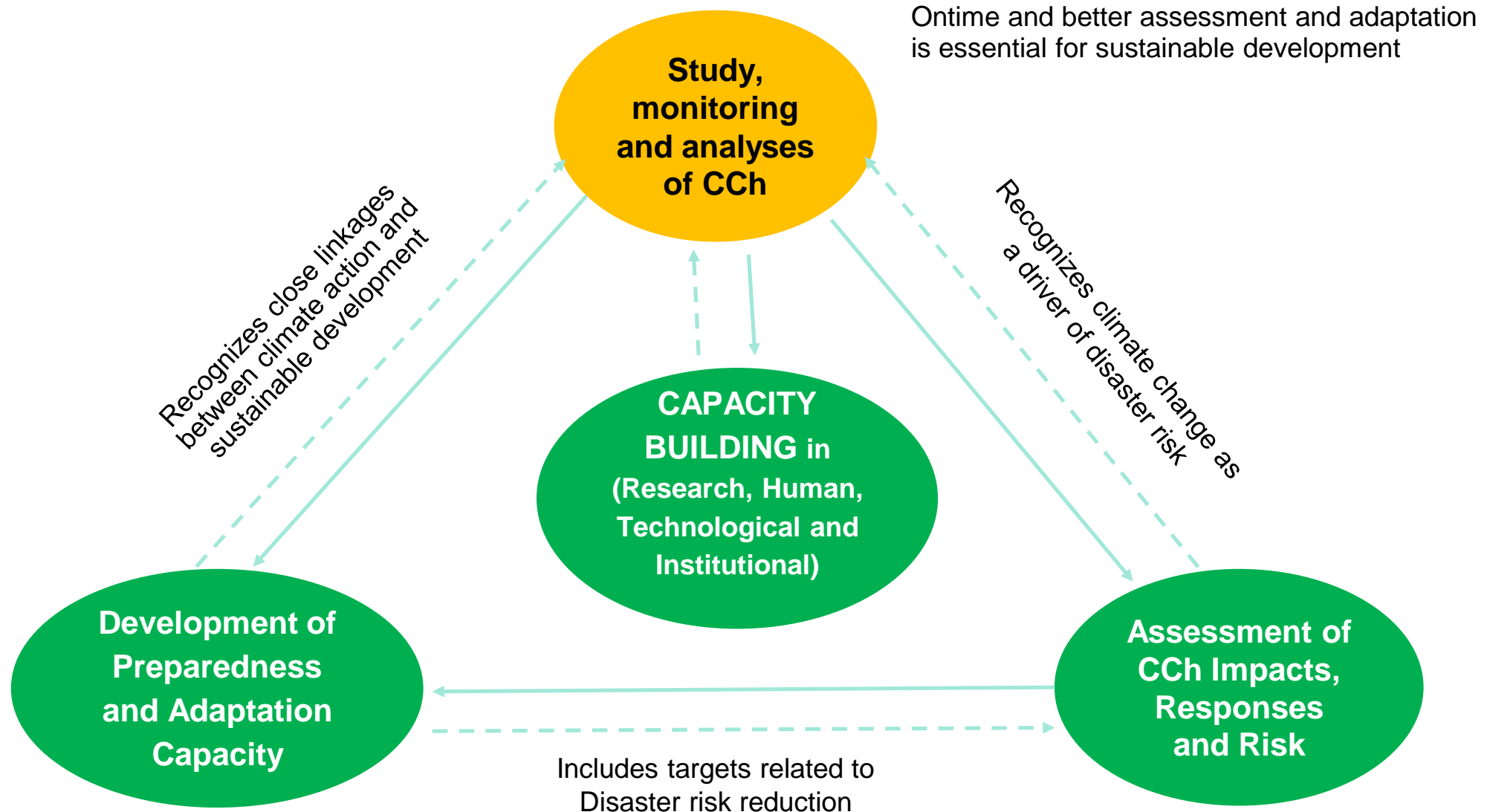
36 Master's degree programs

- ❖ Irrigated Agriculture and Land Reclamation
- ❖ Water Resources Planning and Management
- ❖ Artificial Intelligence
- ❖ Remote Sensing
- ❖ Water-saving Irrigation Technologies
- ❖ Hydrotechnical Structures
- ❖ Agricultural Mechanization
- ❖ Energy
- ❖ Environmental Protection (sectoral options)
- ❖ Jurisprudence (transboundary water relations), etc.

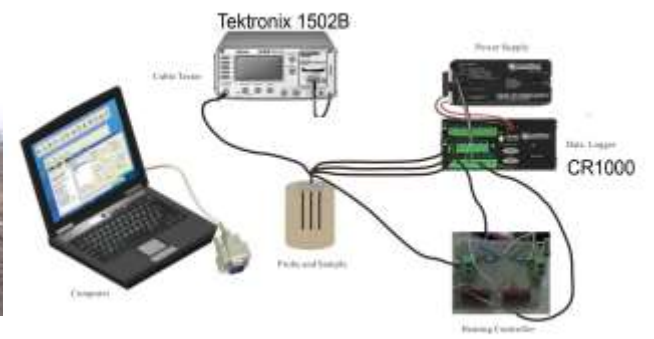
16 Specialties of doctoral programs (PhD и DSc)



SCOPE of Climate focused Activities



EDUCATION AND RESEARCH FARM



A DIGITAL LIBRARY

General literary fund:

- 646,512 titles

Consequently, in English:

- 15,200 titles

Number of publications converted to digital format: 158,500

Number of video lectures on subjects made by the university: 4,553.

The opportunity to use the platform of the National Library of Uzbekistan and libraries of 5 foreign universities has been created IFLA, Amazon, University of Göttingen (Germany), Vytautas Magnus University (Lithuania), Obuda University (Hungary).



CAPACITY BUILDING

TRAINING AND RE-TRAINING OF WATER PROFESSIONALS

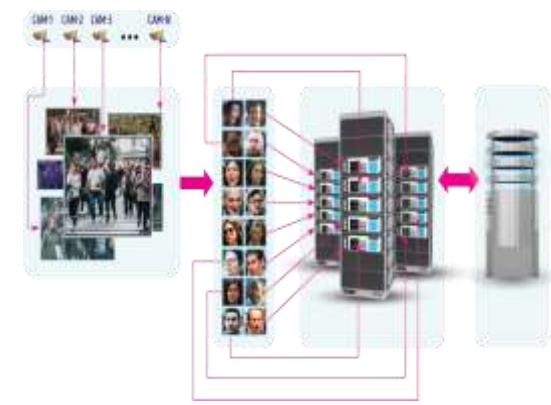


- ☞ Water Resources Management;
- ☞ Effective methods of channel lining;
- ☞ Water use rules and conditions;
- ☞ Water use efficiency and sustainability;
- ☞ Water-saving irrigation technologies;
- ☞ Reduction of water losses and efficient water use in agriculture

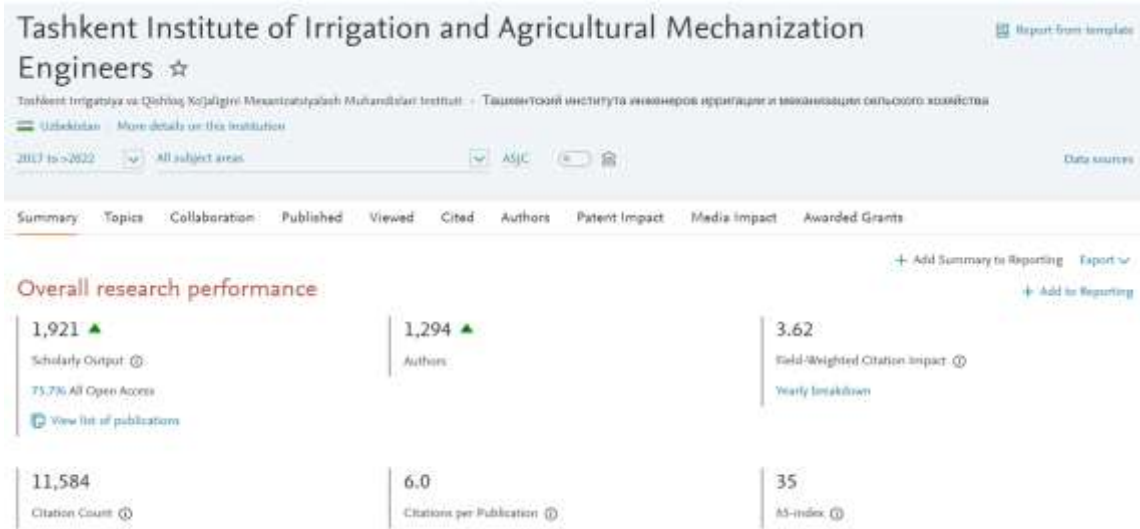
☞ Co-organizing the traditional Tashkent Water Security Lectures conference as a platform for capacity development in adapting to the impacts of climate change on water resources and agricultural production

APPLICATION OF ARTIFICIAL INTELLIGENCE AND DIGITAL TECHNOLOGIES

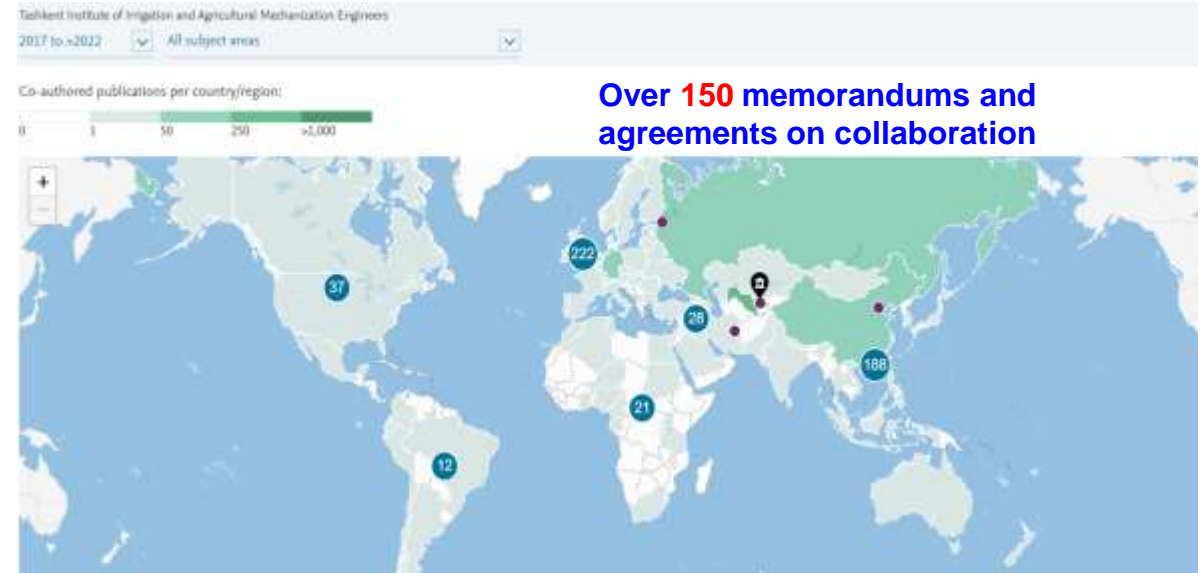
- Structure of recognition system based on a face image
- Speech Recognition System Structure
- An **IT Park** with an infrastructure for training programmers and s to use professional software products.



Publishing activity



Cooperation with foreign universities



International Collaboration



Joint Education Programs

Including those conducted in collaboration with :

1. Wageningen University, (Netherlands)
2. Michigan State University, Colorado State University (USA)
3. University of Live Sciences (Slovenia)
4. Obuda University (Hungary)
5. Giessen University (Germany)
6. Belarus National Technical University (Belorussia)
7. Kazakh National Agrarian Research University (Kazakhstan)
8. Taraz Regional University named after M.Dulati (Kazakhstan)
9. Kizilorda University named afre Korkit-ata (Kazakhstan)
10.

INTERNATIONAL COLLABORATION



- ❑ More than 200 graduates of the master's program in the specialty "Environmental Protection" have received two diplomas.
- ❑ 26 students received diplomas from Wageningen University.
- ❑ 11 students have completed their joint doctoral studies at the University of Giessen, Germany



Anna Bronzes



Nargiz Mirtalipova



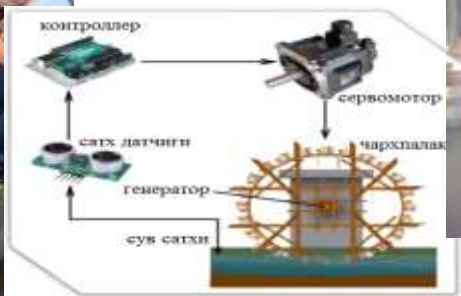
Konstantin Ivushkin



Mamanbek Reimov



Djakhangir Atakhanov



POTENTIAL AREAS OF COOPERATION DEVELOPMENT

- **Azerbaijan:** - Azerbaijan State Agrarian University, Azerbaijan Technical University
- **China:** - Hohai University, Peking University, Northwestern University of Agriculture and Forestry, Xinjiang Institute of Ecology and Geography, etc.
- **Kazakhstan:** - KazNARU, KazNTU named after K.I. Satpayev Eurasian National University named after L.N.Gumilev, Al-Farabi Kazakh National University, Kyzylorda State University named after Korkit-Ata, Taraz Regional University named after M.Dulati, Kazakh Agrotechnical University named after S.Seifulin/
- **Kyrgyzstan:-** KNAU, KNTU, Naryn State University,
- **Tajikistan:** - Tadjik Agrarian University named after Shotemur, Tadjik Technical University named after Osimi, Khojand State University named after Gofurova
- **Turkmenistan:** - Turkmen Agricultural University named after S.A.Niyazov

AREAS OF COOPERATION INCLUDING BUT NOT LIMITED TO:

1. Exchange and mobility programs for students, faculty members and researches.
2. Joint education programs
3. Establishing visiting/adjunct lecturer programs.
4. Collaborative hosting of conferences and events.
5. Joint research projects and publications.
6. Modernization of lab and technical bases.

CHALLENGES

1. Some clauses of the agreements remain unfulfilled for various objective and subjective reasons.
2. The number of joint educational programs and the flow of students in these programs is insignificant
3. There is a need to simplify mechanisms and support cooperation at the level of scientists, teachers, and students.
4. The potential and conditions for developing mutually beneficial cooperation at the university level remain insufficiently utilized.
5. There is a lack of financial resources and language barriers.

DESIRED SUPPORT

- **Financial:**
 - to develop existing and create new joint educational programs;
 - to implement the mobility of students and teachers;
 - for the organization of joint scientific conferences, flight schools, the development of educational materials, teacher training;
 - for the development and modernization of scientific and educational laboratories,
 - for conducting joint scientific research on topical issues on a regional scale.
- **Institutional and organizational:**
 - for establishing and developing contacts and implementing cooperation

***THANK YOU FOR YOUR
ATTENTION***