III INTERNATIONAL CONFERENCE
KRASNOYARSK, RUSSIA
18-20 June 2020

AGRITECH
Agribusiness, Environmental
Engineering and Biotechnologies

«Agribusiness, Environmental Engineering and Biotechnologies»
AGRITECH-III 2020

«IoT and mechanization in Agriculture: problems, solutions, and
prospects»

Adam Umaltovich Mentsiev
Ali Umaltovich Mentsiev
Problem statement

• The IoT has faced remarkable victory in the fields of business, medicine, defence, smart city and many more. Agriculture is a main sector that has a vast functional potential while considering the Internet of Things. In order to generate environmental states that are compatible for the growth of plants and animals, protected agriculture uses artificial devices and modern development to manipulate best suited climatic behaviours. In this study, the main focus will be on the recent problems, and suitable solutions faced by agricultural sector and provide prospective high tech and modern IoT applications, structures and technologies.
In this era, current farmers are able to utilize agricultural technologies such as the following:

- **Sensors**: temperature, humidity, light, water, and soil management.
- **Software**: Tailor made solutions are available in software forms that aims to aid particular farm types with the use of IoT platforms.
- **Artificial Intelligence**: Processing facilities, autonomous tractors, robotics for farm management.
- **Location**: Satellite, GPS monitoring and recording.
- **Data analytics**: Using data pipelining solution for down streaming, individual analytics solutions.
Conclusions

Results, implementation

• With the prediction of increase in population looming in front of us, IoT remains the potential solution to most of the agricultural issues.

• IoT is, and will become, a significant factor to interact people such as government representatives, local consumers, merchants, distributors, and suppliers with embedded agriculture in the future years.
Contacts

Adam U Mentsiev, Ali U Mentsiev
Chechen State University
E-mail: a.mentsiev@chesu.ru