## INCREASING IN FERTILITY, MELIORATIVE STATE OF SALINE SOILS DUE TO THE ORDER OF PRIORITY. SEEDING OF AGRICULTURAL CROPS

ПОВЫШЕНИЕ ПЛОДОРОДИЕ, МЕЛИОРАТИВНОГО СОСТОЯНИЕ ЗАСОЛЕННЫХ ПОЧВ ЗА СЧЕТ ПО ОЧЕРЕДНОСТИ. ЗАСЕВА СЕЛЬСКОХОЗЯЙСТНЕННОГО КУЛЬТУР.

Docent. A. Dadakhojhaev, senior teacher M.A.Xamrakulov, teacher M.Mirsaidov, teacher A.Abdulakimov Namangan Engineering-Construction Institute

**Annotation:** Salinization and meleoric deterioration of the soil causes great damage to agricultural production. Especially reduces the fertility of the soil and the production of planned agricultural products. At the end of the irrigated arable land, deposits and other lands that are not suitable for agricultural production are formed. This is currently an urgent task which removes harmful salts from the soil, creates and recruits salt-tolerant plants and trees.

**Key words:** soil, salinity, severe salinization, mean salinization of crops, damage, fertility, fertility of soil, sequence of sowing crops, arable land, removal of harmful salts.

Аннатоция: Засоление и мелеоротивное ухудшение почвы оказивает огромний ущерб на сельскохозяйственных производство. Особенно снижает плодородие почвы и получение планируемых урожайность сельскохозяйственных продуктов. В конце орашаемых пашнях образуется залежи и прочие угодии, не пригодные сельскохозяйственного производство. Это в настоящее время является актуальной задачей которой удаление от почвы вредных солей, создат и набират солеустойчивых растений и деревев.

**Ключевые слова:** Почва, засоление, сыльно засоление, средно засоление, сельскохозяйственных культур, ущерб, плодородые почвы, очередность, засева культур, пашня, удаление, вредных соль.

The life of living beings depends on the state of the earth, the fertility of the soil. Increasing fertility is essential in agriculture. Therefore, the effective use of land for obtaining crops from sowing in agriculture and increasing soil fertility is the main problem.

To increase soil fertility and improve reclamation conditions, crops are successively planted in the fields depending on their biological properties, botanical characteristics and productivity. These measures are called sequential planting of crops (sowing).

In the lowlands of the Ferghana Valley, especially in the Buvayda and Fergana

regions of the Ferghana region, the Ulugnor region of the Andijan region, the Pap and Mingbulak regions of the Namangan region, soil salinization causes significant damage to agriculture. It is impossible to get the planned harvest for the planned agricultural products. Currently, saline soils are visible on more than five to six thousand hectares in this territory, in particular, the ITP Navruz, Navbakhor in the Pap district of the Namangan region, the ITP Fergana and Istiklol of the Mingbulak district, the area of highly saline and medium saline lands is increasing every year, taking into account this developed project on sequential placement of crops and proposals and recommendations were given for its implementation in farms.

Sequential sowing of agricultural crops according to some indicators is divided into three types: sequential sowing of field crops, sequential sowing of fodder and special crops.

In each zone, the types of successive plantings are divided into types depending on biology, cultivation technology and crop ratio.

With consistent sowing of field crops, 80-85% of the arable land on the farm is allocated. For successive plantings of other types of crops, it is desirable to allocate 15-20% of the area.

One of the important indicators of sequential sowing of crops is the number of fields for sequential sowing of crops. Depending on the number of fields, the sequential sowing of crops is divided into short rotation (3-6 fields), and long rotation (9-10.12 fields)

The number of fields for sequential planting depends on the area of specialization of agriculture in the farm, the number of crops included in the sequential planting scheme, as well as the structure of the sown areas on the farm.

There are 229,514 ha of cotton, 16,664 ha of livestock, 17,671 ha of horticulture, 4,871 ha of vegetables, 9,017 ha of horticulture and 4,324 ha in the surveyed area, and other specialized farm land totals 334,061 ha.

Consistent placement of crops and its proper organization is of great importance in the rational use of land. In particular, salt-tolerant rice, white corn, soybeans, rye, oats, peas, mung beans, beans, as well as salt-tolerant trees: loch (jida), black willow and willow are sown on saline soils.

Within the framework of the project, a farm was selected with 6 fields and 150 hectares of land with a crop plan of 145 hectares, specializing in the cultivation of cotton and grain.

Planting plans were 72 ha for cotton, 43 ha for grain, 3 ha for vegetables, 3 ha for gourds, 25 ha for fodder crops, a total of 145 ha before the development of the planting project

The following is the history of the farm's land areas:

## a) current state.

b) On the project

Grain 1/25	Grain 2/18	After the grain White corn 1/25	After the grain shadow to 13, 5 grams of vegetables
Cotton	Cotton	Cotton	Cotton
3/30	5/22	3/30	5/22
Fodder/s,p.	Cotton	Rice	Cotton
4/29	6/21	4/29	6/21

1st year of the project: 4th field with 29 hectares of rice, 1st field with 25 hectares of grain, then white corn. 2nd field after grain 5 hectares of gourds, 13 hectares of soybeans, mung beans, peas, beans total 18 hectares, 3-5-6 fields of cotton.

2nd year of the project: 4th field with 29 hectares of cotton. 6th field with 21 hectares of grain, after grain 5 hectares of vegetable and gourd crops, 16 hectares of white corn. 3rd field with 30 hectares of grain, 5th field with 22 hectares of cotton - 22, 1st field with 25 hectares of grain, white corn after the grain. 2nd field with 18 hectares of grain, white corn after the grain.

3rd year of the project: 4th field 26 hectares of grain, 3 hectares of vegetables, after grain white corn, 6th field with 21 hectares of cotton, 3rd field with 30 hectares of cotton, 5th field with 22 hectares of cotton, 1st field with 25 hectares of rice, 2nd field with 16 hectares of grain, 2 hectares of gourds, 16 hectares of mung beans, soybeans.

Similarly, the rice rotation period is 6 years. Grain and cotton fields change by 5-10% over the years.

Feed increases by 30% annually. Grain obtained from white corn and rice will increase by 50-60% of the plan.

Expected results of sequential seeding:

- 1. Rational use of land.
- 2. Soil fertility increases.

3. The ameliorative condition of the lands will improve.

4. The level of salinization of saline soils will sharply decrease.

5. The yield of agricultural crops will increase by 15-20%.

6. A sequence of crops is compiled depending on the biological properties and botanical characteristics.

7. The number of plant pests and insects will decrease.

8. Prevents soil erosion.

Consistent sowing of agricultural crops requires the implementation of high agrotechnical measures, and farms are offered the following recommendation in production.

Cleaning of irrigation stations, collector drains used in the farm every 2 years and water supply in January.

Carrying out salt flushing in early spring, leveling the land, selecting crops depending on the level of salinity, including sowing salt-tolerant rice, white corn, legumes, peas, beans, soybeans, alfalfa, etc.

To protect the margins of the fields from erosion and strengthen the edges of the collector ditches, it is planned to plant salt-resistant trees: jida, black willow, mulberry on the right and left edges of the ditches, and after clearing the grain fields, legumes, soybeans, mung beans, beans and beets will be sown.

Depending on conditions, in some areas it is possible to give water in December, and flush with saline in early spring. On highly saline soils, it is necessary to sow rice in the first year, cotton - in the second year, cereals - in the third year, after harvesting the grains, soybeans, mung bean, beans, corn, black corn should be sown from legumes.

If a farm with weak or moderately saline soils specializes in cotton growing and grain growing, then the following scheme of successive sowing of cotton-alfalfa-grain in 10 fields is recommended.

Year	Field										
	1	2	3	4	5	6	7	8	9	10	
1	Б+М	П	П	П	Π	П	Π	П	Б3	Б2	
2	Б2	Б+F	П	П	П	П	П	П	П	Б3	
3	Б <sub>3</sub>	Б2	Б+Т	П	П	П	П	П	П	П	
4	П	Б3	Б2	Б+F	П	П	П	П	П	П	
5	П	П	Б3	Б2	Б+М	П	Π	П	П	П	
6	П	П	Π	Б3	Б2	Б+Т	П	П	П	П	
7	П	П	П	П	Б3	Б2	Б+М	П	П	П	
8	П	П	П	П	П	Б3	Б2	Б+F	П	П	
9	П	П	П	П	П	П	Б3	Б2	Б+Т	П	
10	П	П	П	П	П	П	П	Б3	Б2	Б+М	

The main requirement for increasing the efficiency of crop rotation is the introduction of high agricultural practices, first of all, the thickness of alfalfa before plowing should be at least 1 million roots. For one full crop rotation, 30-40 tons of local fertilizers per hectare are required.

In addition, cotton grown in the fields of crop rotation is fertilized on the basis of agrochemicals and mineral fertilizers N, P, K in a differential order. This increases the fertility of the soil and improves the economic support of farms, which, as expected, increases the yield from 8 to 12 centners per hectare.

To implement these measures, the irrigated area of farms should be at least 350-400 hectares.

## Literature

- А. Дадахўжаев Ўз. Экспо Марказ 1- Республика инновацион лойиҳалар ярмаркаси "Фарғона водийси фермер хўжаликларида қишлоқ хўжалик экинларини алмашлаб экиш схемаси бўйича жойлаштиришни ишлаб чиқиш" Тошкент – 2008 й.
- 2. М. Мирзабоев, Т.Каримбоев, А.Амиров "Тупроқ унумдорлигини ошириш бош масала" Наманган 2012 й.
- 3. Dadahodzhaev A, Mamazhanov MM, Khaidarov S.E. Mapping the manifestations of growth and development of ravines on the density and density of adyr of the Republic of Uzbekistan, Saratov "Collection of articles of the International Scientific and Practical Conference". February 13, 2016, pages 4-7.
- 4. Dadahodjaev A. Akhmedov B. "Tuproq erroziyasi va unga qarshi kurash choralari. FerPI Scientific Technical Journal 2013 number 3.
- 5. Дадахожаев А., Мамаджонов М. М., Хайдаров Ш. Э. Типизация рельефа для оценки оврагоопасности территории Узбекистана //Science Time. 2018. №. 4 (52). С. 92-94.

