

Rapeseed Production in Iran

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In our world, oilseed crops have a special place between different crops and this value belongs to their special compounds inside the seed, which called lipids. Lipids play a major role in nutrition and usually it could be supplied from seventeen different sources.

World statistics show that over the last five years fats and oil production increased rapidly with annual growth rate of four percent and it was three times more than the population growth percentage.

In Iran oil is one of the main agricultural products and it has been a question importance since many years ago. By regulating milk consumption the consumption of animal fats decreased and vegetable oil was replaced. Oil consumption increased in Iran since 1961 (20 million population) and rose to 16.3 kilogram (60 million population) while there was no change in local oil production and caused in sever demand for oilseed production.

The oilseed production started by expanding the area for cotton cultivation since 1962. In 1969 by importing different varieties of sunflower & soybean the oilseed development started in Iran.

Production area & total production in the beginning increased very well but after that there were a lot of fluctuations. In these years planting cotton, soybean and sunflower is common in north part of Iran not only in irrigated lands and but also under rain fed condition.

Soybean production started with 1000 tons in 1968 and rose to 241000 tons in 2003. The maximum soybean production was 230000 tons of grain in 1994.

Sunflower production started with 1447 ton in 1968 and raised to 34000 tons in 2003. The maximum production was 74000 tons of grain in 1994.

The main reason for those fluctuations was the monopoly of north part of Iran for soybean and sunflower production. For changing this situation it was important to focus on new crop which could be planted in rotation cycle of wheat and the best was rapeseed (*Brassica napus*). So project with the aim of producing more oilseeds approved.

Iranian farmers have a long experience in growing crucifer crops They plant *Eruca sativa* since long time ago. It was usually used as green manure.

The experiments on rapeseed started many years ago. The research stations started their experiments with single zero varieties like *ORO* & *SINERA* but later because of the importance of oil and meal the researchers focused on double zero varieties. All experiments shows that rapeseed was well adapted in different climatic zones of Iran. The climatology studies in Iran showed that different climatic of zone are suitable for rapeseed production. By this type of studies the project foresight for rapeseed production in different climatic are as below:

1-Caspian Seashore Climatic Zone :

In this zone farmers can plant rapeseed in winter in 3 positions (rotation with irrigated cereals-planting in paddy fields-rotation with cereals under rain fed condition)-the total production area will be up to 225000 hectare and the total production is estimated to be 444000 tons at the end of project.

2-warm and dry climatic zone :

In this zone farmers can plant rapeseed in rotation with irrigated and rain fed cereals and also in fallow lands. The total area will be up to 250000 hectare and the total production is estimated to be 421000 tons at the end of project .

3-mild cold climatic zone:

In this climate zone farmers can plant rapeseed in fallow lands in rotation with irrigated wheat. The total production area will be up to 160000 hectares and the total production is estimated to be 416000 tons in the end of project.

4-cold climatic zone:

In this zone farmers can plant winter types under irrigated condition. The total area will be up to 120000 hectare and the total production is estimated to be 300000 tons at the end of project.

The first steps of this project showed a nice outlook and successful outcomes as follows:

- 1-Increasing total production area 4.2 times more than first year.
- 2-Increasing the yield 1.6 times more in comparison with first year.
- 3-The total production is 6.6 times more comparing to the first year.
- 4-Oil production was covered %4.5 of country total consumption.
- 5-Meal production was covered %5 of country total consumption.

We wish to obtain a self-sufficiency rate of 73 % for oil and 53/2 % for meal over the next ten years and at the end of project.

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