

SUMMARY

Fiber crops are of great importance for both national and international economy, as they are the main source for producing raw materials necessary for spinning, weaving and oil products industries.

The most important fiber crops in A.R.E. are cotton, flax and kenaf.

Cotton is the main crop in Egypt. It forms an important part of its national income and a main source of foreign currency. In 1965, the value of cotton products was about 19.7 % of the current value of the agricultural production, about 26.5 % of the current value of all agricultural crops. Studies revealed that these figures have started decreasing through the period of study (1965-1987). In 1987, the current value of cotton was about 4.16 % of the current value of agricultural production, about 6.34 % of the current value of plant production and about 10.53 % of the current value of agricultural crops.

Flax has the second importance after cotton. It is used in various forms and different industries. Its current value has increased during the period of study (1965-1987), it was about 0.11 % of the current value of the agricultural production in 1987, about 0.16 % of plant production and about 0.27 % of the current value of agricultural crops.

Data about kenaf are rather limited. Recently; its importance has increased because it may partially replace jute in the packing industry.

The first part of this study concerns the relative situation of Egyptian fiber crops as compared to foreign varieties. The study showed that Egyptian cotton is the main source which provides long staple cotton in the world, specially the extra grade though its production did not exceed 3.8 % of the world production in 1980-1981. Now this ratio does not exceed 2 %. Some competition started now from some countries such as the Sudan, Peru, India, U.S.S.R. and U.S.A.

Flax comes after cotton in its economic importance all over the world. Egypt cultivates about 16 thousand hectares. The Egyptian production of flax fibers in 1980 was about 6 % of the world production and decreased to about 2.5 % in 1988. Egypt is characterized by the high productivity of flax fibers. In 1986, it was about 923 kg/hectare while the universal productivity was about 589 kg/hectare. The Egyptian exports of flax fibers was about 4.1 % of the total world exports.

The study of cotton production within the period (1972/73-1987/88) showed that the world production of cotton increases about 1184.4 thousand of bales yearly. China is the highest producing country, while Egypt is the 8th cotton producing country. It represents about 3 % of the world

production within the period of study. Egypt's production of cotton decreases about 19.4 thousand bales yearly during the same period.

The study of extra long staple cottons in the world during the period (1972/73-1986/87) showed that the world production increases about 83.8 thousand bales yearly. Egypt is considered one of the most important producing countries of these cottons, its production is about 26.3 % of the whole world production, but it decreases about 26.6 thousand bales yearly. It is clear from the study that the world production of long staple cottons increases, in the same period, about 455 thousand bales yearly, in the same time Egypt's production of these types increased about 16 thousand bales yearly. The study showed that the world consumption increases steadily in spite of the competition of industrial fibers. The world consumption of cottons has generally increased about 1470 thousand bales yearly, also Egypt's consumption of cottons has increased about 25 thousand bales yearly. This may be due to over population and raising of the standard of living.

The relation between the world consumption of cotton and the industrial fibers as a whole and cellulose and non-cellulose industrial fibers during the period (1975-1987) showed that the calculated correlation coefficients are about 0.78, -0.55 and 0.64, respectively. The positive relation between the world consumption of cotton and both

industrial fibers as a whole and non-cellulose industrial fibers is due to the over-consumption of both of them. The study showed a competition relation between the world consumption of cotton and cellulose industrial fibers with a correlation coefficient of about -0.55.

The second part of this study, is dealing with the physical factors controlling the production of fiber crops in Egypt. The production depends on the average feddan productivity and the cultivated area. The ministry of agriculture determine, each year, the cultivated area according to a general economical plan.

The study showed that the cultivated area of cotton as a whole tends to decrease while there is a relative constancy of the feddan productivity. Consequently, the production of cotton is decreasing.

The production of extra long staple cottons is about 25 % of the whole production, while the long-staple cottons is about 75 %. The cultivated area of extra long-staple cottons has decreased about 29 thousand feddans yearly during the period (1970-1988), while the area of long-staple cottons has increased about 23 thousand feddans and the area of short cottons has decreased about 28 thousand feddans yearly. This was responsible for an annual decrease of extra long-staple cottons by about 128 thousand kentars and increase in the long-staple cotton by about 164 thousand kentars,

although there is an increase in the productivity of both extra long and long-staple cottons by about 0.09 and 0.03 kantar/feddan yearly, respectively.

Analysis of variance among governorates for the cultivated area with cotton during the period (1982-1987) showed some significant differences, also in productivity.

Some new varieties of cotton have been introduced for cultivation in Egypt such as the American Macknir cotton (220) in Sohag in 1984. It remains in land for 4.5 months. Its productivity is about 11.44 kantar/feddan. Care should be taken for not mixing this new variety with the other Egyptian cottons.

As for flax, it is mainly cultivated in Delta where there is about 96 % of its cultivated area in Egypt. The study showed some fluctuation in flax area from year to year. During the period (1970-1987), it ranged from 68.5 thousand feddans and 32.3 thousand feddans. The cultivated area in the period (1967-1987) showed annual increase of about 1477 feddans, and increase in the productivity of flax straw by about 0.033 ton/feddan.

Egypt is the only country in Africa which cultivates flax. Its production represents about 2.92 % of the world production. It is the third country in the productivity of flax straw as it is about 910 kg/hectare.