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# THE ORGANIZATION OF NATIVE AGRICULTURE IN THE BELGIAN CONGO 1)

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In the Belgian Congo various native agricultural settlements ("paysanaat-stelsels" in Flemish) exist, but they all more or less conform to the following definition, viz.: rural communities subject to their own customary law, or to modernized forms of it, consisting of families who have allowed themselves to be settled in a specially selected part of their tribal landed property, or on land belonging to the state, with the object of living there permanently and working for their own account on holdings allocated to them as individuals or collectively; obliged to follow crop rotation programmes and agricultural methods dictated by the state and assisted by government money to make them paying propositions; backed economically by a co-operative organization, and socially endowed with educational establishments, health services and welfare facilities.

However, the native agricultural settlements that satisfy this definition can be divided into two groups which are fundamentally different from each other:

one comprises those forms of settlement which — provisionally, at any rate — aim only at effecting a mass, collective adaptation of the traditional Bantu cultivation system to present-day economic conditions, which demand high, standardized production from agriculture and postulate a higher standard of living in order to preserve the farming classes;

the other has resolutely broken with the traditional agricultural system, and boldly aims to use the powerful weapons of agricultural mechanization.

Both groups are represented in the Belgian Congo. The first is to be found generally distributed over the country, and already numbers about 175,000 farmers; the second group is still only sporadically present.

It is known that, in the other countries of Africa, large-scale endeavours are also being made to modernize agriculture by both methods of approach; in those other countries, the second method is apparently more widely applied. It is also known that the Belgian Congo was the first region in Africa to take this new course, and that its example and success as regards rational adaptation of the traditional Bantu agricultural system are being increasingly emulated.

On 30 December, 1954, native agricultural settlements in the Congo were distributed as follows:

<sup>1)</sup> Paper presented at the Tropical Agricultural Days, 10 and 11 October, 1955 at Wageningen, Netherlands.

| Provinces  | Farmers to<br>be settled<br>(Ten-Year<br>Plan)             | Number of<br>hectares<br>prospected                                | Number of<br>holdings<br>measured out                 | Number of<br>holdings<br>under<br>cultivation         |
|--|--|--|---|---|
| Oost-provincie Kasai Katanga Evenaar Kivu Leopoldville | 137,000<br>121,800<br>95,000<br>67,530<br>65,250<br>10,000 | 1,682,775<br>1,372,587<br>1,001,947<br>535,700<br>580,356<br>2,000 | 42,791<br>57,467<br>27,422<br>16,847<br>16,000<br>500 | 33,664<br>51,174<br>21,746<br>12,327<br>11,350<br>400 |
| Congo  | 486,580  | 5,175,365  | 161,027   | 130,661   |
| Ruanda-Urundi  | 15,400   | 50,000   | 5,664   | 4,426   |
| Total  | 501,980  | 5,225,365  | 166,691   | 135,087   |

THE DEVELOPMENT OF THE FARMER COMMUNITIES IN THE BELGIAN CONGO

This development can be outlined (very briefly) as follows:

However contradictory it may appear, the idea of the Congo farmer communities — which is reminiscent of collective farming — stems from the idea of individualization in agriculture and, in some cases, of resolute rupture with the static system based on customary law.

Let us give two instances to illustrate this.

In 1935, as part of the general operational plan for that section of the Inkisi area which had been entrusted to us, we took the initiative in starting practical lessons in agriculture for adults. Parallel with this, it was planned that later (in 1938) some educational farms should be established, with the object of training pupils for subsequent settlement as progressive-minded farmers on farms for raising crops and cattle, in villages of their own, under customary law. Such settlements did actually commence in 1941 and, although they had their share of difficulties, they nevertheless achieved a certain amount of success in this very progressive region of the Lower Congo. Several of these settlements still exist, although they have not received any outside support since 1945.

In 1936, however, without adequate psychological preparation, the local administrative official took action to bestow a mixed farm, covering four hectares, on each of four exemployees of the Matadi-Leopoldville railway. Two years later, on its being ascertained that these farms were unviable, responsibility for supervising them was forced upon us. We settled the problem by planting one of the four hectares with citrus trees, the produce of which could be shipped to Belgium, and farming the other three hectares on a rotation system of cultivation of food crops and rearing small livestock.

In our latest journey through, in February 1955, we found that these little farms still existed, supporting themselves by the sale of citrus fruits at Leopoldville and trade in other agricultural products.

The original, badly prepared, plan, was thus not successful.

Both the above plans, however, prove that endeavours have been made since 1935 to evolve a modern agricultural system applicable to the farmers of the progressive region of the Lower Congo — both to those living under customary law, and to those not living under such conditions.

In quite another part of the Congo, viz., in the Lomami district, a similar

experiment had meanwhile been made by the then manager of the NILKO <sup>2</sup>) station at Gandajika. In 1936, by way of a trial, and in order to collect material for studying the matter, the latter settled an ex-employee of his on a small farm, on condition that the employee in question bound himself to follow a specific crop rotation scheme. In 1937 a further six identical small farms were organized.

It is these small farms, originally intended simply as "individual small-holdings", which have actually served as trial material for use in planning the native agricultural settlements or "paysanaten" in the Congo. In this last form they have been applied since 1942 in the Sankuru district, under the auspices of the State Agricultural Service but under the actual management of the staff of the cotton companies in that district, and at the expence of the said companies.

Meanwhile, the NILKO established other trial settlements round Yangambi (settlement of Turumbu), starting in 1940, and round Bambesa (settlement of Babua), starting in 1943.

The Ten-Year-Plan, which was drawn up in 1949, makes provision for applying the new system on a large scale: 385,000 "farmers" had to be established in settlements before 1960. This figure has since (1951) been increased to 500,000; and to date the plans have already been implemented in respect of about 175,000 heads of families. This development is steadily continuing.

In course of time, somewhat varying views have exerted their influence on the system. We shall therefore give a summary of the chief of these individual views, and of their modes of application.

#### THE DIFFERENT VARIANTS

A The "Sankuru" plan (Figs. 1 and 2)

The first applications in a context of customary law were carried out in North Sankuru — more precisely, in the areas of Lodja and Katako-Kombe, where the "native units" or population groups of Omuna and Basambala were persuaded to accept the system. The district in question is largely covered with what is called pre-Katanga forest; it is woodland on the margin of the jungle, which is very easily destroyed. Accordingly, the main object of the planned intervention was to protect this forest, and the cultivable land, by judicious reclamation and by the application of adequate fallow periods and suitable crop rotation; in the second place, a marked increase in the profitability of agriculture was aimed at, in order to augment the means at the disposal of the "farmers" and improve their position in society; and, to achieve both these objects, plans were made for the final settlement of the farmers on permanently profitable farms.

After being applied to the Omuna and Basambala, the "Sankuru system" was further extended to other population groups, as far as into the Maniema, where, at the moment, the greatest successes of all are perhaps being achieved. The Maniema includes regions of savannah and forest regions, and both are concerned in the modernization schemes; the mode of allocation of the savan-

<sup>2)</sup> NILKO: Nationaal Institute voor Landbouwstudie in Kongo. (National Institute for Agricultural Research in the Congo).

a = Cotton (January-September) Peanuts + Maize (September-December) b = ½ Cotton (January-September) ½ Manioc (January) Twelve fields of Year of c = Manioeclearance 64 ares = 7.8 had = Fallow 1962 1968 12 1961 12 a c 1960 11 11 d b a 1959 10 b c 1958 9 b c 1957 8 b c 7 1956 b c d 1955 6 b c 5 1954 c d 1953 4 b c 1952 3 b c d 1951 2 b c d b 1950 c d -

Every year every farmer possesses 64 ares of each

96

of the following crops:

Fig. 1 Native agricultural settlement (savannah). Holdings of fixed superficies permanently allocated to individuals. Gradual, unbroken progression field by field.

1951 1950

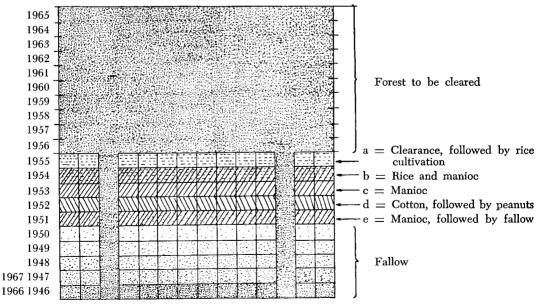


Fig. 2 Native agricultural settlement (forest). Holdings of fixed superficies permanently allocated to individuals. Gradual, unbroken progression field by field.

nah holdings is directly based on the data obtained at Gandajika, and is comparable to that applied in the large native agricultural settlements established round that NILKO station at about the same time.

Allocation of the holdings must necessarily be preceded by investigations, which sometimes take a long time.

First and foremost, a suitable population group, supplied with suitable land, is designated by the area administration; the Area Agricultural Service enlists their support for the cause. Once agreement in principle, or a favourable reaction, has been achieved, prospecting work starts. This work is twofold:

On the one hand, it involves an accurate census of the population, and investigation of the social and political organization and land laws of the population group; this is the task of the area administrator. He obtains the best results in co-operation with the local established agriculturist.

On the other hand, it also involves the thorough pedo-botanical prospecting of the land available, and measurement of the suitable blocks of woodland or savannah. This is the task of the agriculturist, who is helped by native assistant agriculturists.

Each block must be big enough to enable a large group of aspirant farmers — preferably closely related — to settle next to each other on holdings allocated to them as individuals, which holdings, all according to circumstances, are 40 to 100 metres wide and, all according to the projected duration of the fallow periods, 10 to 20 times 40 to 100 metres long. These holdings consist of 10 to 20 fields which are 40, 50 or 60 ares in extent. The number of holdings must be greater than the number of applicants, to enable possible latecomers to be catered for, and to facilitate reafforestation of the fallow fields.

Exploitation of the fields progresses gradually, at the rate of one per year; for instance, after six years the following area is under cultivation:

In front, uncleared forest

6th field: clearance, followed by cultivation of rice

5th field: manioc, with rice as catch crop

4th field: manioc

3rd field: cotton, followed by peanuts

2nd field: manioc, followed by fallow woodland

1st field: new forest in course of growth = restoration of fertility.

In the interest of good supervision, good community spirit in working, and later mechanization, it is essential that all farmers should make progress simultaneously, so that the same crop is being grown at the same time on all the holdings. The fields of temporary defaulters are left behind and by-passed.

The chief characteristic of this plan is uniform, uninterrupted progress field by field.

### B The Turumbu plan (Figs. 3 and 4)

Although this plan is similar to the Sankuru plan as regards its mode of preparation, it differs at two points from the latter in its mode of execution:

The S/N progression of the cultivated strips is systematically interrupted, either by one W/E strip of woodland after every cultivated strip, or by a double strip of woodland after every two cultivated strips, or by a triple wooded strip after every three cultivated strips. The object of this is to facilitate reafforestation of the strips left to lie fallow after cultivation (Fig. 3).

No permanent holdings of equal size are allocated to individuals, but the cultivated strips are redistributed each year, in blocks of disparate size, among the group of farmers.

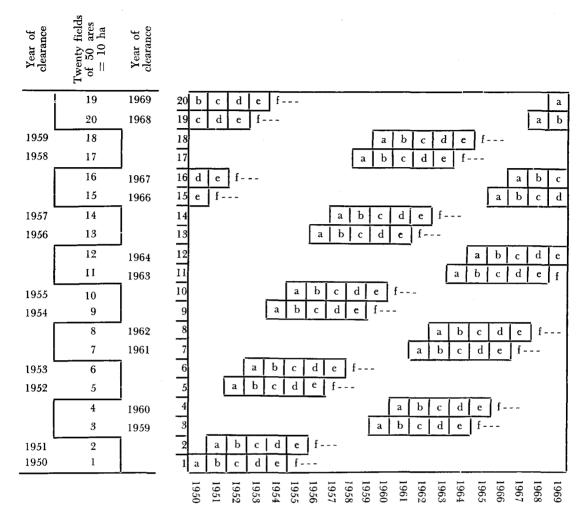


Fig. 3 Native agriculture settlement (forest). Holdings of fixed superficies permanently allocated to individuals. Progression by fields separated by strips of forest (broken progression).

The amount of land each farmer receives depends on the number of eligible parties and on their individual working capacity. The object of this is elimination of unused fields among the cultivated strips; more efficient adjustment to the varying working potentialities of the farmers; and promotion of mechanization (Fig. 4).

## C The Ruzizi plan

Same preparation as for the previous two plans. But in this case there was originally no question of allocating permanent or transferable plots to individuals; the cultivated strips are mechanically tilled, or tilled by mass manual labour, either by all the members of the community, or by groups in the community, and everyone receives a share in the proceeds which is proportionate to the labour he or she has supplied.

This plan was devised by the "Anti-Erosion Mission" in the Ruzizi valley, and was considered necessary in view of, on the one hand, the integral mechanization planned for the region, and on the other hand, the heterogene-

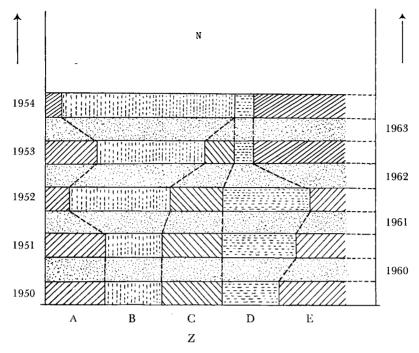


Fig. 4 Native agriculture settlement (forest). Holdings, subject to annual adaptation in superficies, allocated to individuals or collective groups. Progression by fields separated by strips of forest (broken progression).

ousness of the types of soil. It was applied in a district in which cattlebreeding is of predominant importance. The agricultural blocks had to be large enough to enable cultivation operations to be mechanized; lying in hilly terrain, they were terraced in broad-base terraces and rendered irrigable. The rotation system made provision for a fallow period under grass (alternate husbandry).

In course of being applied, the three basic plans for cultivating annual and biennial crops that began in this way in the forties have undergone certain modifications, which have resulted in the native agricultural settlements assuming the following present-day forms:

Native agricultural settlements based on the cultivation of annual or biennial field crops: in forest regions, settlements progressing by cultivated strips interrupted by wooded strips and organized in:

permanent individual holdings,

individual holdings subject to annual adaptation in superficies,

collective holdings;

in savannah regions, settlements progressing by cultivated strips without interruption, and organized in:

permanent individual holdings,

individual holdings subject to annual adaptation in superficies;

integrally mechanized native agricultural settlements, organized in:

permanent individual holdings,

individual holdings subject to annual adaptation in superficies, collective holdings.

D Native agricultural settlements based on the cultivation of perennial crops

These farmer communities may be divided into two classes, according to their mode of origin:

## a Communities arising from the old system of educative compulsion to

- 1 Several years before the last war, cultivation of the oil palm had been recommended to the natives, or enjoined upon them, in and around the "zones d'huileries" (oil palm zones) "protected" circles 30 km in diameter within which permission to harvest and purchase was granted to concession holders, provided they set up modern oil factories and fulfilled other economic and social obligations. The groves of palms were usually planted by heads of families working side by side; sometimes, however, they were the result of collective labour by the village community.
- 2 Before the war, again in some areas only, the natives were encouraged individually to plant coffee plantations round their domiciles. Coffee robusta was planted in the Congo, and Coffee arabica in Ruanda-Urundi.
- 3 During the war a number of Hevea rubber plantations were laid down, generally by collective labour as part of the "war effort" of the native population.
- 4 After the war cocoa was interplanted in a number of favourably situated plantations of Elaeis and Hevea.

Up to the date on which the Decree concerning Co-operatives came into effect (16 August 1949), the palm fruits and coffee beans were delivered to the nearby European estates on the basis of price regulations imposed by the government. The zeal and regularity with which this was done largely depended on current market prices. Since the introduction of co-operative systems the palm and Hevea plantations (with or without cocoa) have generally been redistributed in individually held plots. This was not necessary in the case of the coffee plantations, which had everywhere been laid down and exploited on a purely individual basis from the start.

Farmer communities which live chiefly on the proceeds from these old plantations are usually designated as "native agricultural settlements growing perennial crops."

# b Communities rationally incorporated in the new system of native agricultural settlements

In certain cases in which land was scarce — for instance, owing to density of population, or as a result of establishment in a border region between forest and savannah — and in which the natives had expressed the desire to have their land officially distributed among them, application of a mixed form of settlement was resorted to. This mixed form consisted of perennial crops and fields of food crops (with or without cotton or Urena), in separate blocks. In view of the fact that the population groups concerned here were all progressive in outlook, all these settlements were laid out on a basis of individual occupation and exploitation of the holdings. The crops involved were Elaeis, Hevea, coffee, cocoa and tea.

### E Native agricultural settlements based on cattle-rearing

This concerns a certain type of mixed farming, which is only practised in districts where cattle-rearing was hitherto essential and crop husbandry well-nigh non-existent. The heart of the matter consists in using cattle and their manure to promote efficient crop farming; and in making (collective) use for cattle-rearing purposes of the fallow grass fields arising from the crop rotation system.

#### F Native agricultural settlements with native/European compenetration

In some cases a type of settlement has arisen based on a sort of symbiosis of white man and black. The initiative was taken by the European agricultural settlers of Kivu, and satisfied the wishes of their casual labourers. The scheme consists in an agreement whereby the European planter leases parts of his plantation to those labourers on a share-tenancy system. All the work of maintenance and harvesting is carried out by the labourers in return for a percentual share in the yield.

Another form of compenetration which also satisfies the desires of the natives — however strange it may appear — is that in which white and black settlers are established beside and among each other in the same area, and help each other with advice and assistance in the operations of cultivation, harvesting, processing and marketing. This form exists in Ituri, and is being considered as a means of developing the broad valley of the Lufira, in Katanga.

It goes without saying that application of these various plans is determined both by soil conditions and by the evolution of the population.

As regards this latter factor:

The method of permanently-held individual holdings is suitable in places where the individualistic development of the natives is in full swing; this, as a general rule, is the case in the savannah regions. The advantage of the method is that it offers a guarantee of permanent use of the land — which will act as a stimulus to taking care of that land, improving it, and acquiring it as quiritarian property. These are all highly educative and progressive tendencies.

The utility of the last stage of development can be disputed. Some people declare that certainty of permanent use of the land is equivalent to ownership of it; others emphasize the aspect of the land's value as security in connection with the granting of credit.

The disadvantages adduced for the method are: rigidity, lack of adaptability to the varying labour potential of the native farmer, and the possibility of its being an obstacle to mechanization of the processes of cultivation,

The method of individual holdings with annual adaptation in superficies does not possess a single one of the advantages of the method of permanently-owned individual holdings with fixed superficies; but, on the other hand, theoretically at any rate, it has not the disadvantages of permanent individual allocation. It is advised for application in regions in which individualization plays little part as yet, and in which the ancestral usages of annual distribution of the land are still held in honour - i.e., as a general rule, in forest areas.

It can rightly be claimed that such backward regions are steadily becoming rarer; but, on the other hand, it should also be borne in mind that provisional adherence to the method in question may provide useful or even essential data for the later mechanization of the cultivation operations.

The collective holdings method is obviously being abandoned, even in the Ruzizi valley, where it first originated as a result of the special regional and tribal conditions there. At any rate, that is the view of Mr. Tondeur, who was responsible for promoting and applying the method. In August 1955, after having explained that the available tribal territory has to be divided into value classes, each of which is submitted to individual mechanical preparation, he wrote:

"Each individual, instead of being assigned to a geometrically regular holding on which he is obliged to cultivate *all* crops, has at his disposal here various fields distributed over the tribal property, which are allocated to him by the authorities responsible for administering customary law, and suited to the various crops which he wishes (or does not wish) to cultivate.

"No manufactured rules exist for distribution of land, exchange, sale, rent, inheritance; and each man can do with his harvests exactly what he wishes.

"In the course of the years the boundaries of the private fields become established; rights of enjoyment become consolidated; and the land laws based on customary law

develop naturally towards individual appropriation of the cultivable land by the farmers in proportion to the desires and working capacity of each of them.

"The method safeguards the concept of collective ownership of pasture and forest lands and of fallow land. On the oher hand, it quickly leads to personal ownership in the inhabited places.

"One of the essential characteristics of the method is that it permits all kinds of great and small fluctuations in the number of farmers, and an evolution of the rural community in which the classes of big and little farmers, cattle breeders, market gardeners, artisans, hired labourers, etc., arise of themselves...." (TONDEUR, 1955).

To me it seems superfluous to give a more detailed description here of a series of concrete applications of all the above mentioned forms of native agricultural settlement. On the other hand, I think it decidedly important to say more about some of the numerous special aspects of the system.

I shall confine myself to discussing the following five:

#### 1 Individual or collective occupation of land?

Let us here, to begin with, postulate that the preference one may have for one of these two systems is normally influenced on the one hand by the philosophical views one holds and the political opinions proceeding therefrom, and on the other hand by a pronounced interest in economic or social implementation of the systems.

This axiom does not, however, prevent us from observing — as we have already done above — that, just as in our European cultural history, man in the Congo evolves spontaneously from collective mass-man to individualistic personality. And even to those who consider that our western civilization is developing inevitably towards new forms of collectivism, the question must present itself as to whether a personalistic stage may not be necessary there too, as transition period.

Whatever the truth of this may be — and leaving on one side all philosophical discussions, as well as all argument concerning the possibility of individuals being, in due course, highly personalistic and nevertheless possessed of a sense of community and acting as members of a community — the advantages and disadvantages mentioned above remain undeniable. Other present and future necessities, such as mechanization of the operations of cultivation, control of disease, manuring, etc., can be obtained just as easily in either system, provided the people concerned submit to a discipline which is all the more valuable for being voluntary.

Incidentally, the majority of Belgians in the Congo have great confidence in the individualistic system supported by co-operation and mutual aid.

#### 2 The home of the farmer in the native agricultural settlements

For theoretical considerations, farmers were originally encouraged to build their houses in the first field in their holding, along the settlement base line, which was laid down as a serviceable road for traffic. This system of separate small "farmhouses" was soon found to be a fatal mistake, for the sense of community is so strong with these people that they care nothing for the convenience of living so close to their work, but set the greatest store by living snugly together in villages. In addition, preparations were made from the beginning to establish economic and social amenities (grain barns, storehouses, machine parks, schools, welfare facilities) which are only conceivable in a collective context, and round which the entire village therefore had to be built.

Accordingly, no dissentient opinion is held any longer on this matter, and the small farmers in the native agricultural settlements everywhere live in neat villages, built at sources of water or gradually in course of being supplied with wells and all the facilities appertaining to a modern village.

#### 3 Cattle rearing in the native agricultural settlements

It may be that in the wartime trial period insufficient attention was given to the fact a farm must not only be a paying proposition, but that both the two important aspects, of stock raising and crop husbandry, must be fully represented on it. However, partly as a result of the mistake referred to above in connection with location of the settlers'

dwelling-houses, partly as a result of the desire to valorize superfluous and low-priced food products, it was soon realized that cattle rearing was an indispensable element of he farming system, and also that it had to be practised at a sufficient distance away from the blocks on which crop husbandry was carried out.

This resulted in the establishment of many a nucleus of horned cattle in places where there had never been any before, and also in more care being taken of small livestock (mainly pigs) than had ever been the case up till then.

Cattle rearing in the native agricultural settlements has hitherto chiefly been carried out collectively — at any rate on collectively-owned or municipal fallow or pasture land. Doubtless there is nothing wrong with this, because it accords well with the conceptions of customary law; and it may continue to be satisfactory for a long time because it facilitates sanitary and other supervisory duties of the government technical services. Here too the individual can get along very well with developing forms of collectivism or cooperation.

#### 4 The profitability of the native agricultural settlements

I cannot undertake here to work out detailed calculations in order to compare the profitability of the farms in the native agricultural settlements with those run on the lines of traditional native agriculture. Instead, I shall have to confine myself to quoting a few figures from the very exhaustive general survey recently published by Professor STANER, Royal Inspector of Colonies (1955).

The members of the native agricultural settlement of Babua, in the Oost-provincie, grow 71% more cotton, 41% more pea-nuts, and 17% more rice than the villagers living round about them; their yields per unit of area are 34% higher as regards cotton, 211% higher as regards peanuts, 217% higher as regards rice.

In the Gandajika native agricultural settlements, the first experiments in mechanization increased cotton production by 40 %. Between 1950 and 1954 the revenues of the holdings in the native agricultural settlements rose from 500—3,800 Belgian francs to 6,500—17,000 Belgian francs per annum.

The NILKO gives the following table for the native agricultural settlements of Gandajika, as the result from 269 working days.

|                              | Own<br>consump-<br>tion | Sold in<br>kg | Unit<br>price<br>B.Frs. | Value of production B.Frs. |
|------------------------------|-------------------------|---------------|-------------------------|----------------------------|
| Cotton                       | _                       | 70            | 4.50                    | 315                        |
|                              |                         | 600           | 6.50                    | 3,900                      |
| Maize                        | 850                     | 300           | 1.40                    | 1,610                      |
| Peanuts                      | 60                      | 170           | 4.00                    | 920                        |
| Manioc                       | 1,800                   | 3,200         | 1.30                    | 6,500                      |
| Miscellaneous (cattle, etc.) | -                       | 1,500         | _                       | 1,500                      |
| Belgian francs               | 3,770                   | 10,975        |                         | 14,745                     |

In 1954 the members of the Medje coffee co-operatives each received an average sum of 3,000 Belgian francs for their coffee alone.

Various co-operatives possess a capital of more than ten million Belgian francs; some make annual profits of several million francs.

#### 5 Marketing of products

It goes without saying that marketing is determined by the location of the farming villages in relation to the centres of consumption. Thus, crops of low market value, such as rice, maize and (chiefly) manioc, can only be marketed if there is a centre of industry in the neighbourhood, or if cheap transport facilities are available. If this is not the case, such products must be valorized by cattle-rearing or industrialization. It can also be argued that, under unfavourable market conditions, it is best not to cultivate crops of this kind, but, in arguing thus, it should be borne in mind that a well-balanced crop rotation is likewise a factor of some weight here.

As regards the industrial crops, they have either only to be conditioned or to be specially treated.

With one exception, no native agricultural settlement conditions any of the following crops:

Robusta coffee is usually delivered to a European estate which processes the fresh or dried beans together with its own production.

The Arabica parchment coffee is delivered to a semi-state bureau set up for the purpose (OCIRU = Office du Café indigène du Ruanda-Urundi).

The tea grown is to be manufactured in the factories at present under construction from government funds.

The question of establishing a semi-state bureau for Urena fibre is being investigated. Cotton is treated at the expense of the planters, in the factories of the cotton companies, for a remuneration of 13% of the subsequent market price.

As opposed to all this, various agricultural co-operatives already possess rice-hulling plants and peanut-shelling plants, plants for removing the grain from maize cobs, manioc mills — all either in the form of permanent installations or mounted in travelling vehicles.

Many co-operatives have facilities for carrying out industrial processes, such as preparation of palm oil and Hevea rubber; some have their own coffee-preparing plants. These establishments have sometimes been rendered necessary by circumstances, sometimes set up owing to the intervention of progressive officials. Some of the installations are well managed by able European managers in the services of the co-operative concerned. Others are badly managed, or maintain insufficiently close contact with the members of the co-operative; none are entirely in native hands. The general opinion here is that it would be premature to urge the native co-operatives to industrialize, and that it would be much more advisable to bring about good collaboration between the farmer communities organized on a co-operative basis and the existing European concerns — more, that there are advantages to be gained from the evolution of a modern "farmer class" and a co-operative movement, in order to increase the number of European agricultural settlers and to integrate the European and native agricultural systems in one unified rural economy.

#### Conclusions

I should like to refer back to a statement I made in 1950 and published in "Lezingen over de Opvoeding der Plattelandsbevolking in Belgisch-Kongo" (Lectures on the Education of the Rural Population in the Belgian Congo), which appeared in 1951.

"In the opinion of some people, the system of native agricultural settlements has been the Number One post-war success in the field of agricultural economy and domestic policy.

"To us, however, it looks like a second attempt, made after the first abortive experiment in compulsory cultivation of quantity and undertaken, like that experiment, for purely economic motives, to establish, this time by compulsory cultivation of quality, a native agricultural economy which is considered to be necessary and in which the rural worker of the Congo is turned into an object producing animal and vegetable substances which have to bring in money and provide the labourers in industry with food; and also into an object producing an abundance of healthy fresh labour for the benefit of the foreign exploiter of his country.

"In the above paragraph we have named at once the three fundamental moral errors which threaten to make the new system unviable: compulsion instead of freedom, object instead of subject, subordination instead of equality. And if we turn to investigate only the main reasons for the fiasco of the old system of compulsory cultivation of quantity, we find, in addition to these three moral causes, a further three material and interconnected causes: excessive demands as regards areas of land, too easy-going an attitude on the part of government staff, and corvées."

I am pleased to be able to say that these sombre forecasts were not fulfilled, and that the prosperity which now characterizes many communities of native farmers is proof that efforts (although inadequate) must actually have been made to remedy the above-mentioned shortcomings.

Compulsion was no doubt more or less necessary at first, in order to get the new system working. And perhaps the business was also tackled on too broad a scale, in cases in which caution decreed that risks should be restricted. Results, however, turned out to be not so bad as might have been feared: and the later expansion has usually taken place gradually from the established centres as points of departure, and after the new aspirant farmers had the chance of assuring themselves on the spot, at leisure and at liberty, of the purpose and results of the system.

It would be difficult now still to adhere to the opinion that the farmers established in the native agricultural settlements are merely producing objects in the service of a planned economy, in view of all the attention given to the social welfare side of these communities. On the contrary, the observer soon has the impression that the human individual is cared for there for his own sake, and that everything is designed to promote an active development which must make him conscious of his personality and competent to place that personality voluntarily at the service of construction of his own rural economy.

Conversion of the position of social and economic subordination, occupied by the land worker in relation to the industrial labourer, into a position of social and economic equality, remains a hard task; a comparison with the little we have achieved in this sphere in our European countries is not always conducive to optimism. And yet it must be admitted that here too some good will is present, even in the higher organs of the government of the country. Perhaps in order to achieve more it would be necessary to effect a planned reinforcement of the Agricultural Service by addition of a strong team of experts in agricultural economy.

Excessive demands in respect of areas for cultivation is a recognized evil, that has been avoided in the new settlements, but is difficult to eliminate from the older settlements, where the original plans have been in process of being carried out for years past.

Thus, we read from a comparative table relating to the Oost-provincie and reproduced in the account by Professor Staner already referred to, that the number of working days required in 1953 were as follows: Uele district 287, Ubangi district 291, Babua settlements 378, Aketi settlements 388.

Even if it should be necessary for the native agricultural settlements to make big profits in order to raise the standard of living of the farmers, such results must not be achieved at the cost of more working days than there are days in the year. The solution lies largely in mechanization. This has been realized, and the study of that factor is being very diligently pursued.

Laxity of government staff, resulting in the compulsory crops having been being laid down along or near to the motor highways, without sufficient attention being paid to the circumstances of land value and land laws, is a detrimental factor that has been entirely eliminated from the system of farmer settlements. Since the disillusionments to which some of the first native agricultural settlements have rise, the primary rule has been followed that both the above circumstances have to be thoroughly explored, and all problems solved, before any start can be made with allocation of blocks of land.

Corveés have meanwhile also been abolished everywhere; the individual's theoretical obligation in this respect can be fulfilled by payment of a sum of money in the form of a slight increase in tax, the proceeds from which are used to pay for execution of the corvées concerned by permanent gangs of paid labourers. Labour for urgent corvées rendered necessary for reasons of public utility is paid at the full rate, and such corvées consequently signify a source of extra income which is often gladly welcomed.

This entire policy, carried out by competent and very devoted teams of area administrative officials and agriculturists, has thus succeeded in causing the native agricultural settlement system — received at first with some mistrust — to be regarded as an undisputed success and as a first definite step towards modernizing peasant agriculture in the Congo.

Technically closely connected with the traditional methods, and distinctly superior to them from the social and economic points of view, it has found favour in the eyes of the natives, and that not only among those groups of the population living under customary law — as can be seen from the action of native settlers in forsaking their over-populated tribal territories to establish themselves in modern types of community e.g. Luzumu (Leopoldville), and as is evidenced by those people who do not live under customary law and who leave cities and centres of industry to return to the land and to agriculture: Buta, Leopoldville, Stanleyville, Bukavu, Elisabethville....

Accordingly, it is with optimism that we observe this development. And it is with optimism that we note the increasing results in the spheres of mechanization, manuring and disease control — results which, in the near future, will permit the great step to be taken of replacing long-term fallow woodland by short-term fallow grass pasture, the outcome of which, in due course, will be the achievement of considerably higher yields with considerably less effort.

The present native agricultural settlements are, admittedly, not an end in themselves, but a successful step on the right path towards ultimate triumph.

#### BIBLIOGRAPHY

STANER, P.: Les paysannats indigènes du Congo Belge et du Ruanda Urundi. Landbouw-kundig Tijdschrift van Belgisch-Kongo, 46 (1955) 467-558.

Tondeur, G.: Le paysannat indigène dans la programme de la M.A.E. Landbouwkundig Tijdschrift van Belgisch-Kongo, 46 (1955) 852-888.

Wilde, L. O. J. de: De economische vorming van de landelijke Bantoe. Lezingen over de Opvoeding der Plattelandsbevolking in Belgisch-Kongo (1951) 35-76.