MODELS FOR PROFIT DISTRIBUTION IN COOPERATIVE FARMING

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I. INTRODUCTION

Since the end of the 50's, a series of producer associations have been
formed for working land in common in Spain, thus forming a new enter-
prise starting with small farms which were cultivated individually before.
Usually two legal forms are applied to them: The Cooperatives and the
Syndical Groups. The resulting type of enterprise can be situated,
within the ample area of "group farming" as "cooperative farming,"
between "joint cultivation" and "collective farming," where the
individual land rights of the owner are conserved. A true pooling of
the lands are made, of the capital and of the work, giving place to
alterations in the traditional order of agricultural exploitation, in
the social as well as economic aspects.

The Farming Census in Spain of 1972 offers for the first time some con-
crete results on the Associations in existence. The following table
gives an idea of its general characteristics with respect to the
national figures (1).

	Total farms in the country (including associations)	Producer Associations	Percent
Number of farms...	2,571,059	4,148	0.16
Area (Has)	45,702,850	829,139	1.81
Has/Land Farm	18.10	207.80	--

Source: Censo Agrario de Espana 1972.

The most significant aspect is the jump from farms averaging 18.1 Has. to
others which cultivate 207.8 Has. The advantages this change present in
the improvement of structures has been sufficient motive for the Spanish
government to support then, divulging its advantages and conceding
subsidies.

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Spain.
    (1) It must be pointed out that the major part of the Associations
are in the Northern Zone of the country where small distribution
(minifundia) is more frequent. There are provinces such as Segovia
where the group area is almost 8 percent and Palencia which exceeds
12 percent.

The distribution of the profits in the cooperative farming is not
regulated juridically, and thus the farmers have had to elaborate their
own formulas. This is one of the most conflictive aspects, since many groups
have disintegrated because of the lack of clear norms which would lend
to efficient profit sharing. We are thus trying to state, as a result
of our investigation, the forms which the Spanish farmers have adopted
to distribute their profits in the cooperative farming, indicating those
which might be the most useful. The selection of one formula or another
is important in the future of the Associations. We believe that for
any country with socio-economical characteristics similar to those of
Spain, it will be interesting to know the model which may result as the
most adequate one.

2. ADOPTED FORMULAS

The embellishments presented by the various formulas are analyzed in
the seven models described below.

2.1 Proportional sharing to the land

This is the most frequent case; the benefits are proportionally divided
according to the contributed land and only to this. In this model the
worker receives his wage and the management, if existing in a different
form, will also receive a wage which will be called a "salary." The
other fixed asset and current asset receive interests, but never a
proportional part of the profit.

The form of profit distribution is thus very simple. Subtracted from the
total production are all types of expenses which are considered, variable
costs: fertilizers, seeds, sprays etc., and from the results are subtracted
those common costs such as depreciation, interests, etc. That exceeding
amount will be distributed proportionally to the contributed territorial
capital (*). In the Associations in which some of the members rent some
land of the group the profit does not go to the owner of the land but
rather to the member who contributes the land he rents. The owner in
this case receives the rent agreed upon with the rentor (2) but not profit
from the exploitation of the land. The profits are obtained from the farm
following this formula:

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(2)   M. Bueno, J. Lamo De Espinosa and F. Baz, "Explotacion en comun de
      la tierra y concentracion parcelaria." Madrid, SNCP O=R. 1966, page
      54.
(*)   Territorial capital = Land, improvements, etc. (fixed assets)
      Exploitation capital = Livestock, machinery, etc.
      Circulating capital = Stored crops, seeds, fertilizers, etc.
      (current assets).

$$P_1 = FP - E - D + S - C - I - L_1 - D_1$$

Which is:

P_1 = profit plus own capital interests

FP = final farm production

E = outside expenses (Products bought, services contracted, etc.).

D = depreciation

S = subsidies

C = contributions and taxes

I = interest paid to third parties

L_1 = labor, steady as well as temporary

D_1 = direction and administration costs.

We have said that the sharing of profit P_1, following this model, was that which the largest number of associations have accepted. This is due to two reasons: on one side, the influence of the socio-economic system in which the groups are immersed; and on the other side, the first con-stituted group for joint cultivation, the Cooperative of Zuniga, follows this method of sharing and has been used as an imitated model for many years.

Due to the acceptation of this formula by the farmers, this type of associations can be found in all regions in which the cooperative farming has been developed.

We say that all of the profits goes proportionally to the territorial capital, but the proportion corresponding to each one of the contributing lands depends on the classification or evaluation modality made on the lands. We have observed the following variations.

    (a)   The profit sharing is made proportional to the number of hectares contributed by each one of the members to the group.

    (b)   The profits are distributed proportionally according to the value that each one of the members has received in the classification of the land made by IRYDA when making the land consolidation.

    (c)   There is an intermediate form between the two mentioned
        above. Until the concentration is made that indicated in (a)
        is followed, and once the land consolidation is done, (b)
        is used. Generally, the statutes specify that once the concen-
        tration phase has finished, the sharing will be done in
        accordance with the evaluation made by this Agency.

    (d)   In some groups we have the case of adjudicating a value to
        the land accordance with the taxable liquid fixed for each of
        the contributions. This is the least frequent case.

Within these versions of land evaluation, the optimum is that in which
the farmers have a "classification" made for land consolidation; those
using the liquid taxable amount as a means for reaching the nearest pro-
portional value are farther from reality, since it (the liquid taxable)
has no other purpose than for the Treasury Ministry. Evidently the
selection of one or another version does not effect the formula pro-
foundly: to destine the entire profit to the land.

2.2 Percentage of profit to land and work

In this second formula are the associations who opt for sharing the
profits between the contributed territorial capital and the work which
the members do in the exploitation. We are considering here the groups
which share more than 20 percent of the net profits with the workers. So
that the worker is interested in the economic results it is necessary
that he receives an important share of the "profit," and if this is not
so, the work that he does will be done as a simple laborer who does not
participate in the growth of the enterprise.

In this formula, an interest is paid to the contributed capital, a rent
to the land, and a wage to the workers. The net excess not used in direct
or indirect costs is divided between the land and the work following
diverse proportions, generally fixed following the pressures which these
factors can present. The profit is obtained following the formula below:

$$P_2 = FP - E - D + S - C - I - I' - R - L_2 - D_2$$

Where:

    I' = interest on the capital itself

    R = rent of the land

    L_2 = base wage of the laborers (less than the real wage);

    D_2 = management costs (also lower).

The acceptance of this formula by the associations is less frequent. The reason for this seems to be the traditional significance of the land as the basis of agriculture, and thus the territorial contributions, represent a superior value to the farmer than any other. The importance, and normally the power of the territorial capital at the moment of constitution, when the norms are fixed, is very superior to any other component. This reasoning which is true at the moment of constitution, cannot have the same validity in the future, when the true motor driving the group is the work. Our preference for this formula comes from considering that it gives greater stability to the groups, avoiding possible posterior dissolutions, which cause such a bad example for farmers thinking of forming an association.

2.3 Identical sharing for each member

We define this third formula as that in which the land contributed by the members is remunerated with a rent, the other capitals receive an interest, and finally, those who participate in the work receive a wage in accordance with those paid in the zone. The remaining amount of resulting net profit is distributed in equal parts between or among all of the members. The profit P_3 would be:

$$P_3 = FP - E - D + S - C - I - I' - R - L_3 - D_3$$

If we carefully analyze this formula and remember the cooperative principle of "one man, one vote," and the tried-for equality among members, with the cooperative return the result of the activity of an association where all of the members work equally, we must acknowledge that this is probably the modality of distribution of profits which is closest to the General Law of Spanish Cooperatives (3).

Since the resulting Spanish associations are a partial result of the transfer of the active population of the farming sector to other sectors, and at the same time activators of this transfer since less labor is needed in the formed groups, this model could be an obstacle for reaching a greater productivity in labor. It could cause the owner member a series of economic losses if he abandons his participation in the group, and thus would leave him to remain in the group, even though the labor costs are excessive.

(3)   The cooperative return – says Art. 18 of the Law of 1974 – will be accredited to the members in proportion to the operations, services or activities made by each member in the cooperative.

2.4 Distribution between land and work

Almost all of the models analyzed here are not isolated, but rather in general, when an association is created which initially adopts the formula, this is later propagated for the region and province. This phenomenon is so true that only studying the cooperative of one district we can see the amount of common traits among them, with the sharing of profits being the largest manifestation of this tendency.

The profits, in this case, are divided between land and work, and although it may seem the same or similar to the second formula studied, it has its own peculiar characteristics which differentiate it and give it a special significance. The word "profit" in the second formula could have a more or less real significance, but here it is totally palled, since all of the interests in this model are grouped, land rent and salaries of the member-workers are not considered outside the exploitation and thus do not receive money until the end. From the resulting capital, a part is retained for amortizations and after deciding how much is to be left in the reserve fund, the rest is distributed between territorial capital and labor. The "profits" equal:

$$P_4 = FP - E - D + S - C - I$$

The territorial capital can be evaluated by land consolidation, in accordance with the area contributed, or by any other means. The number of working days is directly noted, and compiled by weeks or months and at the end of the campaign each members work is obtained.

The sharing is made knowing the amount to be distributed and with the percentage of the land and work fixed beforehand. Within these two large groups, each member receives that corresponding to him in accordance with his participation with land or work. The variation in the percentages can arise when a group with the same land increases their production by incorporation of a cattle section or any other reason calling for a greater labor force. By dividing the "profits" in this case with the same proportion, although the profits may have increased, it could be that the daily wage decreases. This phenomenon has not escaped the experience of the farmers, and they have found the solution themselves by varying the percentages as the production of the exploitation evolves. This can be seen in the sharing which in one year was made 50 percent between land and work, in later years came to be 60 percent to be shared for days worked, and 40 percent for territorial capital.

This type does not improve on the one stated in second place and nevertheless demands a more detailed accounting. The members frequently ask for advances and the days worked must be rigourously controlled.

2.5. Equality in profits to equal contribution

Up until now in all of the above mentioned methods we have talked about profit, labor costs, interests, depreciations, etc., which means that all of these things have been put on the books. However, all of the associations do not have a minimum basic accounting which permits detailing the costs, and as a consequence, the form of arriving at obtaining the profits to be shared. The existence of a large number of generally small groups do not carry any type of accounting, simply income and expenses, which makes it more difficult to make a detailed division and equitable division among the diverse factors involved in the exploitation.

With these conditions the associations opt for making the easiest and most comprehensible division for all components. The remaining capital from the campaign is distributed in equal parts among all of the members.

$$P_5 = FP - E + S - C - I$$

This equality in the division of "profits" has demanded an equivalence in the land contributions and this gives way to diverse types within this same formula:

1st. - All of the members bring into the association the same amount of land. Although we have said that this formula is adopted by those small groups which do not use accounting, it is very difficult to find this equalling formula, leaving part of the land or some members outside the group.

2nd.-If the group has the possibilities of renting land, each one of the members will pay the rent necessary to equal the one who has the most land.

3rd.-All of the members bring their land, with the ones who have less land paying rent to those who have most. The amount paid by some and received by others will be equal to the difference between that contributed by each one and the average area per member.

4th.-The contributions are not equal, but rather a rent is paid to the land, and he who brings the greater amount of land to the asso- ciation receives a greater amount of rent.

Evidently in this model, the true receiver of the profits is the work. This solution, viable in small groups where all of the members work, and

with a small area so that the exploitation system barely changes, cannot be taken into consideration when the association is large and the production increases enormously when some of them abandon agriculture.

2.6. Crop distribution in equal parts

We want to include in this formula those associations which make crop distributions in equal parts. If we make a differentiation here with respect to the above mentioned type, it is because the nature of dividing the products gives a certain differential air, if it cannot really be considered a type of the fifth. The P_6 would be, thus the same as P_5 above.

In this formula as in the above, wage are not received and the capitals are not remunerated with interest. All of the members work the same in the group, which does not mean of course that they all do the same type of work.

The reason for dividing the crops must be looked for, more than in the distribution, in the organization of the association. One meaning which is found in the first place is that of the non-existence of a true union of the association, since in the majority of cases the crop division is due to the incapability of constructing a common granary which would implicate all members in the future by making a common group investment. In all associations of this type the ghost of dissolution is found to linger. It is difficult to understand how if the easiest aspect, that of commercialization which in other countries has developed enormously, is not done jointly, the joint cultivation could have a long life.

2.7. Cattle formula

Frequently there are cattle groups or associations with important cattle sections where the profit sharing is done differently than in the cultivation section. The distribution of profits depends on the contributions at the moment of constitution. Generally, when it is decided to form a cattle group or to enlarge an association with a new section, what is done is that all of the members give the same amount of capital. Starting from this premise, it is evident that the amount of money received by each one will be the same. All of the members obtain the same profit, the division made with respect to the livestock has equalled it.

In the case of the cattle section, this equality can be maintained faced with the heterogeneity of agricultural exploitation. It is a way of homogenizing the profit sharing in the association, since the cattle are always acquiring greater importance in the farm. The independence of both sections is maintained by fixing a price for the products re-employed from one to the other section, leaving both activities perfectly delimited and offering different profits.

3. SUMMARY OF THE FORMULA FOR DISTRIBUTION OF "PROFITS"

Among the formulas we have just described we would like to point out the two which are most extended of those seven cited. The first formula, where the profits are distributed proportionally to the fixed asset (land) and only to this, is more largely accepted by large associations with many members. The other formula which has been elected by a great number of associations is the fifth, in which the profit is distributed in equal parts among the members who group together identical areas. This type of distribution is accepted in the majority of small associations.

A better accounting system (4) in the big associations faced with an almost complete lack of accounting in the small one, many times made up of relatives and without many complications in the management and control. The level reached in the accounting explains partially the selection of formula. In the attached table we have presented a summary with each one of the factors of production involved in the cooperative farming. The deficiency in some of the formulas do not call for much explanation. As we have said, the sharing of crops is one of the most inadequate since it could be an obstacle for the good functioning of the group. In others such as, for example, the first where the profit is distributed in accordance with the contribution in fixed asset (land), complications could also appear. In a cooperative in Castilla which follows this formula, where the majority of those who attend the periodic meetings in the village are workers in the cooperative and live in the district, the facts and deeds listed below have happened as a consequence of the decisions made in their assemblies.

One first decision taken has been that of buying a sack harvester instead of buying a tank when the additional investment did not justify the decision. The reason is that with the sack harvester the number of

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(4) C. Vazquez and R. Sancho. "Estudio sobre la organizacion y contabilidad de las agrupaciones en comarcas de O.R." Boletin de Informacion no. 34, Ministerio de Agricultura, 1970.

SUMMARY OF FORMULAS FOR PROFIT DISTRIBUTION

F o r m u l a s	Territorial C. (Fixed asset)	Exploitation C. (Livestock, machinery)	Circulating C. (Current asset)	Work	Management
Proportional sharing in accordance With territorial capital	% Profits	Interest	Interest	Wage	Salary
Percentage of profits to work and land	Rent % Profits	Interest	Interest	Wage .% Profits	Salary % Profits
Identical sharing with each member	Rent	Interest	Interest	Wage	Salary
Distribution between land and work	% Profits			% Profits	% Profits
Profit equality for equal contribution	Rent			"Profits"	"Profits"
Crop distribution in equal parts				Crops	Crops
Cattle formula		Profits			

workers necessary in the harvesty season is greater, thus benefiting
those who wish to work days in the cooperative to obtain higher
incomes. Incomes which would not be received if these days were not
worked, since this money is going to enlarge the profits where the
part received by them will be smaller.

Another second deed has the same characteristics as the above. Since
the cooperative has a sufficient number of sowers, when seeding time
arrives the assembly in its majority, as we said composed of workers,
decides that a great part of the area must be sown by hand. The
justification has the same nature as in the above case. Desire of the
member-workers to make a greater number of working days and thus obtain
higher incomes.

Summing up the problem, we can say that in a cooperative like this where
the mechanization produces unemployment for some of the members who wish
to work, when these are the majority it can possible bring about a
series of wrong decisions in the assemblies. The result of these
decisions is going to hurt the members who contribute land and do not
work, by receiving less profit, and help those who work by carrying out
useless tasks.

Let us see what would happen if instead of using the first formula,
they selected that which divides the profits between land and work.

The characteristics which, affecting the sharing of profits, present
themselves in an average year of the cooperative are the following:

          Area .... 800 Ha.
          Wage .... 600 Ptas/day
          Wages expenses .... 1,508,000 Ptas.
          Shared profits .... 2,800,000 Ptas.

We said that the amount of wages paid is superior to that which should
correspond if the number of truly necessary working days had been worked
and not those done in excess which, as they are superfluous enlarge the
expenses,

Supposing that they employ 10 percent working days more than needed,
although in some cases it is possibly higher than this number, we shall
go on to describe the result which the second formula could offer. The
conclusions will be valid for any percentage, the advantage of this type
would be greater when the work losses are greater, but also are valid for
smaller percentages. Under this plan is:

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Total number of days worked ...............   2,513
of which 10 percent have been useless .....     251
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If instead of selecting the type of profit sharing which is only for
contributed land, it had been established that a lower wage would be
paid and the working days would have a share of the profits, other
values would be obtained. Let us suppose that it had been:

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Wage .............................   200 Ptas.
percent of profits for laborers ....    28 percent
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Taking into account that the production and the rest of the expenses will
not vary, now we have for the 2,513 - 251 = 2,262 working days:

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Wages (2,262 x 200) ....................     452,400 Ptas.
Profits (26 % of 3,855,600) ............   1,002,456   "
Total received by member-workers .......   1,454,856 Ptas.
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As we see, considering 26 percent for distribution among the member-
workers, they receive 53,144 Ptas (1,508,000 - 1, 454,856) less (5).
They will have, nevertheless, the advantage of not working the 251 days,
the supposed 10% of the total, and as a consequence a wage of 643 Ptas/day
instead of the 600 Ptas. they now receive. The member who merely con-
tributes land now receives the part corresponding to him of the 54,144
Ptas. which, in the other way, would go to paying the useless working
days. The advantages are really for both parties.

The lesser acception of this formula is justified by the difficulty
of fixing a definite percentage, giving way to pressures and con-
frontations between the two principal factors of production: capital
and work. The obstacles appear even in the first moment of constitution,
when the decision for forming an association and fixing the norms is
in the hands of the land owners. Their intrangience is not conceding
profits to the workers mortgages the life of the association. Greater
amounts of associations are formed but they also disintegrate more.
A clearer norm given by the State would permit an expansion of the
associations which would be less rapid but much safer. On the other
hand, by reducing the failures a greater multiplying affect would be
obtained given the optimum economic and social results presented by
the associations.

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(5) They would have received the same amount distributing 27.4 percent.

The information given, within the sphere of cooperative farming, on
a national or international level, on formulas for profit sharing which
are adequate would permit a better organization of same and consequently
a rapid and efficient reform for determined agricultural structures.