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Time to Decide on French Agriculture

Les notes du conseil d'analyse économique, no 27, December 2015

Despite significant amounts of subsidies, the French agricultural sector delivers unsatisfactory results in several respects: falling employment rates, partly low revenues, environmental degradation and declining commercial performance. The profession often highlights regulatory complexity and high labour costs as the main culprits. But also the predominantly small structures, in particular in the downstream industry, sluggish technical progress, unequal competence level among farmers, lacking coordination between sectors and questionable non-price competitiveness strategies add to the problem. In this context, public policies lack clear direction as various tools sometimes pursue conflicting objectives. Today, agricultural policy clearly needs to be refocused on key long-term objectives.

Protection of natural capital needs to become a central part of agricultural policy. This is both an environmental issue and a condition for the future economic success of agriculture itself. To achieve this, policy needs to be directed at financing amenities, such as soil quality, rather than pursuing uncertain objectives with undifferentiated subsidies. Regulations, currently working restrictively and not effectively, need to better target results. In order to create the conditions necessary for innovative agricul-

ture, promising biological innovations and spatial data, which are becoming strategic, should not be left to a few international companies. Instead there is a need to help public research direct the innovation, so that to ensure the compliance with biologic regulations. At the same time continuing vocational training for farmers needs to be reinforced by enhancing the role of digital tools, agricultural colleges and higher education. Regarding the French export strategy, national agriculture should principally rely upon a small number of labels promoting food control, full traceability, the absence of antibiotics and growth enhancement products and respect for the environment and animal welfare. Finally, in order to help farmers exposed to market volatility, measures such as smoothing taxes over several years, and the postponement of loan and social security contributions, as well as access to risk coverage, need to be promoted more favourably than administered prices and counter-cyclical subsidies. At the EU Community level, non-transferable contractual subsidies targeting public goods or with social objectives should substitute surface-area based subsidies. Competitiveness, environment and revenue are not necessarily incompatible in agriculture. However, major reorientation of policies is required to successfully reconcile them.

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Despite significant amounts of subsidies, French agriculture delivers unsatisfactory results in several respects: declining commercial performance, falling employment rates amounting to almost 18,000 full-time jobs between 2010 and 2013, low revenues in certain activities and environmental degradation. This underperformance has a large number of different causes and cannot be simply attributed to high labour cost and complex regulations. This calls for a clarification of agricultural policy objectives, both in terms of the orientation of European mechanisms and their application in France. We recommend that central importance should be given to the protection of natural capital and emphasis should be placed on research, training and the safety of products.

Worrying developments despite considerable public subsidies

Every year, French farmers receive more than 10 billion euros in public support.¹ On average each of the 320,000 farms² receives around 30,000 euros of direct payments, see Table. To these numbers are added a number tax exemptions and deductions (for hazards, investments, exemption of petroleum products from tax until 2016, etc.). Farmers' social security contributions cover only a part of total sector social security expenditure, mainly due to the demographic imbalance present in the sector. Considerable tariff protection for agricultural and extra-Community imports such as meat cuts, sugar and certain dairy products also results in support for producers, not directly appearing in budgets.

On average in 2013, these subsidies thus provide 84% of total agricultural income.³ Livestock farming is particularly dependent on state aid, with subsidies amounting to 89% of income in dairy farming and 169% of income in the beef-cattle sector. Sheep farms like the ones found in the Alps are an extreme case, receiving around 59,000 euros in public transfers while producing net revenue less than 19,000 euros.⁴ Agricultural sectors and regions that display negative added value without counting the subsidies in certain years are not uncommon: intermediate consumption exceeds the product value, a paradoxical situation in the productive sector.

Subsidies of this size are not necessarily a problem or a sign for poorly conducted policies. Various different characteris-

tics of the agricultural sector may legitimise State intervention to attain economic, social or environmental objectives. The economic rationale for public initiative is notably based on the difficulty of covering all the risks of agricultural production, which is characterised by small businesses without market power and, in some cases such as livestock farming and perennial crops, by the long period necessary for supply to adjust to prices. Social objectives may also be pursued, in order to fight against rural poverty and narrow the income gap between agriculture and other sectors. Land-use planning by maintaining rural economic activity should also be mentioned. Finally, the objective could as well be to favour public goods produced by agricultural activity such as landscape, highly valued by other activities (tourism), the protection of buildings and infrastructures from avalanches and the prevention of urban flooding from meadows and other periodically flooded areas. In order to evaluate the pertinence and effectiveness of these public subsidies, French agriculture therefore needs assessment according to three dimensions: public expenditure needs to be examined in the light of successful or unsuccessful attainment of objectives.

Total amount of direct subsidies (pillars I and II) for French farms in 2013

Farms (full-time only)	Per farm (in euros)	Per ha of utilised agri- cultural land (in euros)	In % of pro- duction	In % of pre-tax profit/ loss
Dairy	38,600	361	16	89
Beef	41,300	375	32	169
Sheep-goats	33,900	397	38	198
Grain-eating animals/ Granivores	12,900	295	3	49
Field crops	38,800	323	20	50
Viticulture	3,700	159	2	8
Arboriculture and market gardening	8,900	524	3	25
Other	23,200	340	12	65
Overall	30,500	349	15	84

Source: RICA France 2013; INRA processing: Vincent Chatellier.

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¹ See Commission des comptes de l'agriculture de la nation (CCAN) (2015): *Les concours publics à l'agriculture en 2014*, ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt, CCAN Meeting of 3rd July. Here we count subsidies directly received by agricultural producers and not the financing of operations that benefit them indirectly.

² The general agricultural census (*Recensement général de l'agriculture*) for 2010 mentions 514,694 farms. However, operations of one hectare or only ten hives are counted as farms. Here we count the 320,000 farms that are actually professional (INSEE "medium and large" category). Considering that the latter 70% of beneficiaries receive 97% of subsidies –European Commission (2013): *Report on the Distribution of Subsidies 2013–*, the average French professional farm receives around 28,000 euros in subsidies. The figure of 30,500 euros in the table results from the fact that the sample used (FADN) excludes part-time farms.

³ See Farm Accountancy Data Network (FADN). The figure comprises direct subsidies as a whole, and therefore includes "single payments" (divided into "basic payments" and "green payments" from 2015), agro-environmental subsidies and compensatory allowances for areas suffering from natural handicaps. The income is the net profit/loss on ordinary activities before tax.

⁴ See, Farm Accountancy Data Network (FADN) 2013, TF sheep-goats, areas of > 600 m elevation for the Provence-Alpes-Côte-d'Azur region. For a more detailed analysis see Bureau J-C. and S. Thoyer (2014): *La politique agricole commune*, La Découverte, p. 85.

A contrasted social situation

Both sector-level and microeconomic data suggest that in structural terms the revenues of “professional” farmers are on average not lower compared to other sectors (Box 1). Their assets even turn out to be larger than those of the average household. But this finding needs to be put into perspective. First, there are very large sectoral disparities, which are only partially offset by households’ non-agricultural revenues.⁵ Thus, numbers appear to be structurally low in the suckling cow and sheep sectors as well as in the field vegetables and non-AOC (Appellation d’origine contrôlée) winegrowing sectors. Large disparities also persist between specific groups of the population, such as indebted young people and retirees. Second, uncertainty and fluctuations in farmers’ income are a contributing factor to poor living conditions, as the importance of fixed costs and the debt level in the sector mean that low income periods rapidly translate into critical situations.

Until 2015, France had opted for subsidies distributed according to individual historical references (based on payments received in the past). Thus, this long applied system amplified structural inequalities. The recent reform of the CAP necessitated switching to a flatrate system of subsidies based on surface areas, while leaving each Member State margin for manoeuvre.⁶ France, like seven other Member States, has chosen to increase subsidies for the first hectares, resulting in a reallocation of an increased budget fraction to small farms. The reform also aimed at shifting subsidies from the northern producers to those of Corsica, the South-East and the Massif Central. At the sectoral level, the reform directed financial support away from cereal farmers to extensive stock breeders with large land areas and to those not having prior historical references (winegrowers and market gardeners in particular).⁷ Compared to the previous system of individual historical references, which was skewed from a social point of view, these reallocations improve the subsidies’ redistributive character. However, it remains that the surface area criteria is not a pertinent basis of allocation regarding any social objective.

1. Comparing farmers’ income with that of other members of the working population

It is very difficult to compare farmers’ incomes with those of the rest of the population in a rigorous manner. The figures highlighted by the European Commission often compare the exclusive part of income that persons classified as “farmers”, because they have a few cows, derive from agriculture, with the income of employees in industry. Comparisons with household income give a more reliable picture of actual socioeconomic conditions, but are rejected by agricultural organisations, which do not consider supplementary income derived outside of agricultural activity to be pertinent.

According to the French national agriculture audit committee (CCAN), the pre-tax profit/loss from agricultural activity including subsidies per non-wage earning worker on “medium and large” farms was around 27,200 euros in 2014, slightly lower than in recent years (around 32,000 euros between 2010 and 2014) but close to the average over a longer period (since 2000). These figures do not primarily show low average income as compared with other professional categories, but rather big variation between specialisations and years. The pre-tax profit/loss per non-waged annual work unit for producers of “general field crops” was on average greater than 60,000 euros, while for producers of sheep and goats it was scarcely more than 18,000 euros in the five years from 2010 to 2014. Even for field crops, incomes are very low in certain years (2009). Moreover, these averages mask much larger individual fluctuations.

The average income for an agricultural household in 2010 (38,200 euros) appears slightly above average. However,

the criterion used (“foyer” [tax household comprising all of the people included on the same income tax declaration] rather than “ménage” [tax household (dwelling) comprising all of the people included on various tax declarations submitted for the same dwelling] or individual) makes comparison difficult. It combines spouses’ incomes when they make a single tax declaration. The most recent INSEE figures, like those of the Observatoire des inégalités (Observatory of Inequalities), do not distinguish between sectors of activity. Although they locate serious poverty in urban areas, and particularly in Île-de-France, rural departments are not exempt (Pyrénées-Orientales and Creuse).

Comparisons of assets show that, at the same income and age, farmers have much higher gross private assets than those of other households (in the average farming household, gross professional assets are estimated at 213,000 euros and private assets at 275,000 euros). Farmers are also more indebted but, at 260,000 euros, their average net assets remain much higher than the assets of households as a whole (86,600 euros).^a

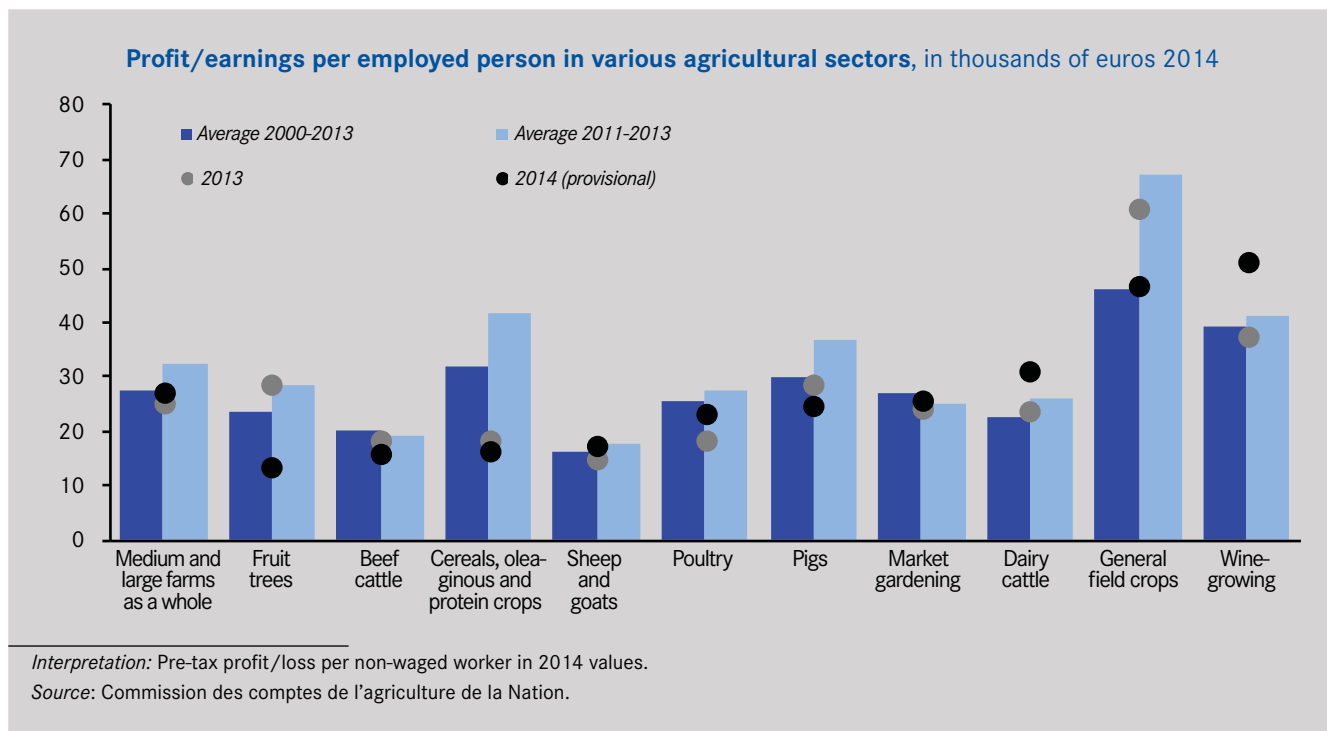
Over a longer period, even taking the unfavourable year for agriculture of 2014 as a point of comparison, actual income per farm has increased by 4% since 2000, that is to say a pattern close to that for employees in the rest of the economy. A large part of this increase is explained by reduction in the sector’s workforce.

^a Lamarche P. and M. Romani (2015): “Le patrimoine des indépendants” in *Emploi et revenus des indépendants*, INSEE Références. It is not possible to distinguish between the remuneration of professional assets and the remuneration of work for farmers, as is also the case for the majority of self-employed workers.

⁵ Delame N. (2015): “Les revenus non agricoles réduisent les écarts de revenus entre foyers d’agriculteurs” in *Emploi et revenus des indépendants*, INSEE Références. In 2010, non-agricultural income provided a supplement for farming households, which drew 60% of their income from agriculture. One third was composed of income from property, 10% from pensions and the remainder comprising incomes from non-agricultural activities.

⁶ For an overall description of this reform and its potential consequences see, for example, Bureau and Thoyer (2014) *op. cit.*

⁷ Chatellier V. (2013): *Les effets redistributifs des décisions françaises relatives à la PAC post-2015*, Académie d’Agriculture de France.



An alarming environmental record

French environmental regulations, such as irrigation restrictions, the classification of areas of land as vulnerable zones requiring reduction in use of nitrogen fertilisers and the need to respect “topographical features” (hedges, copses, ponds, etc.) are often considered by farmers as a competitive disadvantage. French environmental regulations are complex and subject to change. Calculation procedures for subsidies and inspection of their conditions are time-consuming and costly both for farmers and for administration. This complexity gives farmers a feeling of legal uncertainty when inspected, as in most cases of infringements the violations of conditions were unintentional. The process of granting authorisations is slow and instructions are not always consistent. Although this situation is not agriculture specific, consumer pressure has however led to sharp increases in “precautionary” measures by the administration concerning agriculture.

However, the need to issue clearer and more coherent regulations should not disguise the essential point: today, the establishment of more environmentally friendly agriculture has become a matter of great urgency.

Indeed, environmental damage related to agriculture, has now reached a critical point in many farming areas and has

sometimes become irreversible. All reports on the water pollution, whether concerning ground or surface water, highlight the high levels of levels of contamination induced by agriculture, crop protection products and nitrates.⁸ Inefficient irrigation practices, promoted by water prices that are low compared to what might be considered its social cost, constitute a threat to groundwater in the Centre and South-West of France. Soil organic matter levels in highly agricultural regions have decreased significantly. Today, almost 20% of French soils face a major risk of erosion. The declining soil fertility (reduction of organic matter, erosion) makes heavier use of chemical inputs necessary in order to maintain yield. Moreover, policies implemented in France have sometimes contributed further environmental damage.⁹ For example, the specific support for the cultivation of maize as a forage crop present in France between 1993 and 2005 was a major cause of the disappearance of permanent grassland whose environmental value is considerable, both as a biodiversity reservoir and for their role in containing flooding.

Biodiversity is declining at an increasing rate. Among the well-monitored indicators, one observes a rapid and drastic fall in bird population levels still considered “common” in agricultural areas.¹⁰ The disappearance of 50% of butterflies in only 20 years illustrates the more general fall in populations of invertebrates at the bottom of the food chain.¹¹ Agriculture is not the only

⁸ Conseil général du développement durable (CGDD) (2013): “Contamination des cours d'eau par les pesticides”, *Chiffres & Statistiques*, no 436. Also see Eaufrance (2015): “Concentration en nitrates d'origine agricole dans les cours d'eau et les eaux souterraines”, *Bulletin Eaufrance*, no 3.

⁹ Sainteny G. (Chair), J-M. Salles (Vice-chair), P. Duboucher, G. Ducos, V. Marcus and P. Erwann (rap.) (2012): “Les aides publiques dommageables à la biodiversité”, *Rapports et Documents, Centre d'analyse stratégique (CAS)*, no 43, 409 p.

¹⁰ For example: 40% fall in populations in the course of 30 years for larks and the common quail, 70% for the linnet in France; and often more than 90% over the same period for species that were already less common such as the little bustard (figures from the *Muséum national d'histoire naturelle*), STOC programme count).

¹¹ European Environment Agency (EEA) (2013): *Populations of Grassland Butterflies Decline Almost 50% over Two Decades*.

cause, urbanisation is also contributing to this decline; however, these phenomena are more marked in agricultural areas.

Despite their simplistic character, monetary estimations show that environmental protection is also an economic necessity. Indeed, environmental damage has reached a point at which its economic impact is perceptible. Nitrogen pollution costs are at such levels that they become comparable to the additional agricultural production initially induced by nitrogen fertilisers.¹² Coastal tourism is one of the victims of this situation. Threats to pollinator insect populations and species that control pests (ladybirds, bats, batrachians, birds, etc.) represent potential societal costs amounting to several billion euro.¹³ For the agricultural sector itself, there is henceforth a real risk that the decline in pollinators and beneficial organisms becomes a factor limiting yields, which is already the case concerning the pollination of rape and seed vegetables.¹⁴ On the long run, the very sustainability of current cultivation systems would be called into question by this combined environmental damage.

Reform of agro-environmental policy is without doubt legitimate. However, deciding to take a “break from environmental constraints” would be an economic error for which tomorrow’s farmers would dearly.

Declining commercial performance

At the commercial level, agriculture and the food-processing industry historically constitute strong points of the French economy. In fact, their aggregate balance displays a structural surplus, amounting to around 9.3 billion euros in 2014.¹⁵ Despite considerable annual variation, linked to the cereal price in particular, this balance is almost equal to its level in 2000 when measured in current value. However, this apparent stability masks increasing disparities. Trade in French agricultural products and processed agrifoodstuffs grew more rapidly compared with the overall basket of goods, with regard to both exports (+3.3% per year on average in current values between 2000 and 2014, as against +1.5% for the overall basket of goods) and imports (+4.1%, as against +2.4%). At the same time, surpluses have become increasingly concentrated in three sectors (drinks

–essentially wine and alcohol–, cereals –wheat and barley in particular– and dairy products –mostly cheese), which together contributed to a surplus of more than 20 billion euros in 2014. Conversely, there are large and increasing deficits in the meat, sea products and fruit and vegetables sectors, for which the combined trade deficit increased from 3.6 billion euros in 2000 to almost 10 billion euros in 2014 (moreover it should be emphasised that the livestock farming sector, which until recently showed a surplus, henceforth shows a considerable deficit). This increasing polarisation has been accompanied by considerable geographical redistribution; exports have been clearly more dynamic outside of the European Union than within it.

In total, France’s commercial performance in agriculture and the food-processing industry appears mixed. France’s share in world exports decreased by around one third in the course of the period, falling from 7.0% in 2002 to 4.7% in 2014.¹⁶ This loss of market share is to a large extent explained by a context in which demand growth mostly originated from emerging economies, which are not France’s traditional markets, and in which new competitors were established themselves. However, France’s commercial performance pales in comparison to Germany in particular, whose exports grew twice as fast (+ 6.6% per year on average), while its market share increased by more than 10%, exceeding that of France in 2007. Admittedly, German specialisation was initially more favourable in geographical and sectoral terms (Central Europe and processed dairy and meat products), but detailed calculations show that it accounts for a combined difference in export growth of around 20 percent for the period,¹⁷ which only represents a fraction of the observed gap.

German growth has its own causes (Box 2), but the comparison would hardly be more favourable with Spain or Austria, which maintained their world market share, or even with the Netherlands and Italy, whose loss of market share was half that of France. This may indeed be described as a far-reaching decline in market position, although loss of market share between 2000 and 2014 is the same in agriculture and the food-processing industry as in other sectors (one third in both cases): the problem therefore appears to be more “French” than specifically “agricultural”.

¹² Sutton M.A., O. Oenema, J.W. Erisman, A. Leip, H. van Grinsven and W. Winiwarter. (2011): “Too Much of a Good Thing”, *Nature*, no 472, pp. 159-161, April and Sutton M.A., C.M. Howard, J.W. Erisman (dir.) (2011): *The European Nitrogen Assessment: Sources, Effects and Policy Perspectives*, Cambridge University Press.

¹³ There is an increasing number of scientific references, we will quote Gallai N., J-M. Salles, J. Settele, B. and E. Vaissière (2009): “Economic Valuation of the Vulnerability of World Agriculture Confronted with Pollinator Decline”, *Ecological Economics*, no 68, pp. 810-821, on pollination and Boyles J.G., P.M. Cryan, G. FG McCracken and T.H. Kunz (2011): “Economic Importance of Bats in Agriculture”, *Science*, vol. 332, no 6025, pp. 41-42, April, on the “value” of the services rendered by bats for example; and research in progress within the framework of the *Évaluation française des écosystèmes et des services écosystémiques (EFESE, French Assessment of Ecosystems and Ecosystem Services)*.

¹⁴ Deguines N., C. Jono, M. Baude, M. Henry, R. Julliard and C. Fontaine (2014): “Large-Scale Trade-Off Between Agricultural Intensification and Crop Pollination Services”, *Frontiers in Ecology and the Environment*, vol. 12, no 4, May; Jauker F., B. Bondarenko, H.C. Becker and I. Steffan-Dewenter (2012): “Pollination Efficiency of Wild Bees and Hoverflies Provided to Oilseed Rape”, *Agricultural and Forest Entomology*, vol. 14, no 1, pp. 81-87 provide evidence of this kind, as does research on the Syngenta experimental farms which find higher yields when the number of pollinators is increased. Breeze T.D., B.E. Vaissière, R. Bommarco, T. Petanidou, N. Seraphides and L. Kozák and al. (2014): “Agricultural Policies Exacerbate Honeybee Pollination Service Supply-Demand Mismatches Across Europe”, *PLoS ONE*, vol. 9, no 1, estimate that 50 to 75 % additional bee colonies would be required in France in order to prevent this “service” from being a limiting factor (their estimates are not unanimously accepted).

¹⁵ See Comext, Eurostat.

¹⁶ See Chelem, CEPII.

¹⁷ See CEPII calculations on the basis of BACI. See Emlinger C. (2015): “Les marchés allemands plus dynamiques que les français dans le secteur agroalimentaire”, *Le Blog du CEPII*, December.

Reasons for under-performance

Although poor performance in terms of foreign trade is not higher in agriculture than in other areas, the French agricultural sector has specific sources of ineffectiveness, with social and environmental consequences, which public policy should strive to correct. Bureau, Fontagné and Jean (2015)¹⁸ put forward several explanatory factors summed up below.

Agriculture in France remains dominated by small farms. Although, beyond a minimum threshold, size is not a deci-

sive factor itself concerning farm performance, it is tending to become one due to the adoption of new farming practices and the observed development of large-scale operations in several countries. Specifically, this involves new techniques based upon sophisticated and highly computerised plant production equipment, and automation in animal production. Moreover, economies of scale are more obvious in primary processing industries, and the limited internationalisation of French food-processing groups (apart from sugar and a few other sectors) are a factor of weakness in an environment increasingly dominated by globalised companies.

2. Comparison with Germany

Over the recent period, Germany has increased its share in world exports of agricultural products and processed foodstuffs. With 4 million tonnes dressed weight, Germany's pork production has increased by 30% since 2000, whereas at 2 million tonnes, France's production has fallen by 5% over the same period. France shows a deficit in relation to Germany (France's balance with Spain has deteriorated still further). Whereas France failed to reach its national milk production quota for 2014-2015 (under-performance of 3.5%, against the background of a 4% reduction in collection of milk), Germany exceeded its own quota by 3.7%. It also exports more cheese than France. With regard to processed products, France is behind Germany on all the export markets, with a few rare exceptions. German abattoirs henceforth process the pigs from several neighbouring countries and then re-export the meat, whereas low levels of use of French abattoirs contribute to their low profit margins.

Several factors are put forward in order to explain this gap between France and Germany. Geographical and logistical proximity to expanding consumer markets is one. Enlargement of the EU has placed Germany at the centre of Europe, while at the same time it made Brittany more "remote", and Central Europe has been the area in which the gap in the market position between Germany and France has widened.

Medium-sized farms are of quite similar dimensions in France and Germany. Nevertheless, the large estates of East Germany, recently modernised and having become accustomed to industrial agriculture, constitute first-rate competitors. These industries benefited from massive investment in new production units after reunification,

and are more automated than in France.^a In particular, they provide cheap raw materials for dairies and abattoirs.

Whereas the most workforce-intensive areas of production have been suffering in France for the last 10 years, they have on the contrary expanded in Germany (as well as in Spain and in Central European countries). Figures on differences in labour costs are not all consistent, but the differences measured appear very large, in particular for low-qualified work. In the production of fruit and vegetables and horticulture, the hourly cost of labour is considered to be one and a half times higher in France than in Germany (respectively 12.4 and 7.90 euros per hour in 2013).^b In the slaughter and cutting up of meat, comparisons are potentially distorted by the massive use of "workers on secondment" in Germany, who are not included in employment figures. Once this factor has been taken into account, the cost of labour once again appears to be about of one and a half times higher in France than in Germany.^c The application of a minimum wage in Germany might change this situation, but agriculture has the benefit of being in a transition regime and the reality of a wage increase remains to be ascertained. Moreover, the fixed-rate VAT system in Germany is considered more favourable to farmers than the French system (Rouault, 2010, *op. cit.*).

Germany has used renewable energies in order to subsidise its farms. German farmers apparently receive almost 9 billion euros for their production of renewable energy, and photovoltaic energy.^d Thanks to high repurchase rates, the biogas programme has expanded to such an extent that a non-negligible part of farmers' incomes comes from this resource which, moreover, considerably reduces their cash flow problems.

^a Rouault P. (2010): *Analyse comparée de la compétitivité des industries agroalimentaires françaises par rapport à leurs concurrentes européennes*, Report submitted to the Ministers for the Economy, Industry and Employment and Food, Agriculture and Fisheries by the head of the interministerial department for the food-processing industries and agro-industry.

^b Cf. Besson A. and P. Dedingier (2015): "Réalité des écarts de compétitivité dans les secteurs agricole et agroalimentaire liés au coût du travail avec certains pays européens et analyse des dispositifs de protection sociale des salariés et des non-salariés", *IGAS Report*, no 2015-009R/CGAAER 14143. Darpeix A. and É. Bergeron (2009): "L'emploi et la compétitivité des filières de fruits et légumes : situation française et comparaison européenne", *Notes et Études Socio-Économiques (NESE), ministère de l'Agriculture et de la Pêche*, no 32, pp. 7-40, even find divergences of a simple or double order in labour costs for seasonal workforces in fruit production.

^c Cf. Besson and Dedingier (2015) *op. cit.* and Lécuyer B. (2015): *Le coût du travail dans l'abattage-découpe de porc en Allemagne et en Espagne*, IFIP (Institut du porc), Mimeo, 7th September.

^d Raoul D., R. Nicoux, G. Le Cam, V. Létard and E. Sittler (2012): "Rapport d'information sur le déplacement d'une délégation de la Commission des affaires économiques en Allemagne", *Rapport du Sénat*, no 628, 4th July.3. Common Agricultural Policy: first and second pillars

¹⁸ Bureau J-C., L. Fontagné and S. Jean (2015): "Comment expliquer les contre-performances de l'agriculture française ?", *CAE Focus*, no 010-2015, December.

More restrictive regulations and higher labour costs are often considered by professional organisations to be a comparative disadvantage for France. It is difficult to draw the conclusion that there is a real imbalance to the detriment of French farmers at a regulatory level. However, there are very great differences in labour costs in sectors requiring very large workforces (fruit, vegetables) and in the primary processing of animal products, when compared with countries such as Germany, Spain, Italy, and even more so with Poland and North Africa.

The apparent loss of impetus in productivity gains may be explained by numerous factors and lack of innovation cannot be ruled out. Agricultural producers' training plays an essential role in an environment that demands increasingly advanced skills. This applies particularly in upstream production processes. In this regard, France's results are mixed.

Moreover, upstream-downstream relations are very unevenly organised, depending on the fields, and less well coordinated than in Northern Europe: although producers are in a strong position in certain well-organised upstream sectors (sugar, oilseed and protein crops), their position is much weaker in other fields (meat, vegetables and fruit).

Finally, the non-price competitiveness strategies pursued in France, which consist of linking quality and geographical origin, are questionable. Indeed, they lack of clarity on export markets, in which consumers primarily recognise registered trademarks instead of registered designations of origin, and where positioning at the high end of the market cannot serve as an overall strategy when faced with aggressive competitors offering mid-range products (for example, the case of French wine competing with New World wines).

Choice of objectives and coherence of instruments

Agricultural policies involve questions of great complexity that cannot be addressed in detail in this report. However, it is possible to highlight the systematic pitfalls with which these policies are confronted, particular in France: lack of clear direction, piling up of insufficiently effective tools that sometimes pursue conflicting objectives, high levels of expenditure which do neither achieve objectives in terms of competitiveness, nor ensuring decent revenue for farmers, nor environmental protection. The excessive importance given to short-term concerns and vested benefits often prevents the achievement of key long-term objectives.

The new CAP enables choices

Since the regulations of December 2013 and the delegated acts which appeared in 2014, the CAP has become more flexible in terms of choice, thus leaving the Member States considerable margins for adaptation. In France, the national adaptation of the CAP was materialised in the "Loi d'avenir" ("Act on the Future of Agriculture") adopted in October 2014. Among the areas of flexibility allowed by European regulations, France chose a middle way regarding the majority of criteria, however with three distinct options. It is among the countries that have opted for "recoupling" aid. These are subsidies directly encouraging production.¹⁹ Above all, France targeted subsidies coupled to livestock farming, which as a whole received a large amount of support in 2015, resulting from national trade-offs and new allocation procedures for subsidies falling under the "first pillar". France has used the available margins to allocate payments to young farmers and to give priority to small farms. It thus opted for an additional premium for the first 52 hectares (to the detriment of the largest farms), although it did not choose to cap payments to large farms. Like all Member States, France was able to reallocate part of its budget between the first pillar of the CAP (principally direct income subsidies) and the second "rural development" pillar (which includes environmental subsidies in particular, see Box 3). It chose to transfer only 3% of budgets from the first to the second pillar, markedly less than the United Kingdom for example.²⁰

A clear difference emerges between Member States on how they used the margins of manoeuvre within the CAP in order to direct their policy, particularly concerning "public goods". Some Member States, such as Poland, used all available means in order to limit the "greening" of the CAP. Others, in particular the United Kingdom, made the opposite choice. France is in an intermediate position. In 2014, it only devoted 338 million euros to agro-environmental measures, less than 4% of direct subsidies granted to farmers. The implementation of environmental policies in France is often out of step with the declared ambitions. Since the 1990s, the Ministry of Agriculture has devoted large budgets to programmes aiming at controlling nitrate pollution, which have been described as ineffective by severe reports from the General Inspectorate of Finances (Inspection générale des Finances) and the Cour des Comptes [the French Supreme Audit Institution]. The last programme of this type has been less restrictive than its four predecessors in certain aspects (in particular regarding the spreading of effluents, eligible surface areas, etc.). The objectives of the Grenelle Environment Forum (Grenelle de l'environnement)²¹ to reduce the use of plant protection

¹⁹ France opted for an increase of up to 15% (the maximum possible under the EU texts) in the proportion of first pillar subsidies coupled to production (principally beef, sheep meat and protein crops), whereas Germany, the United Kingdom, the Netherlands and Ireland made very little or no use of this option.

²⁰ However, it should be noted that some Member States chose to make a transfer from the second to the first pillar.

²¹ A group of decisions on the protection of the environment taken in September and December 2007, after a consultation phase.

products by 50% resulted in no more than simple awareness-raising measures, without any action concerning quantities or prices, leading to almost total failure of the “Ecophyto” plan (plan for reduction and control of the use of phytosanitary products).²² The “Biodiversity Strategy” (*Stratégie pour la biodiversité*) adopted by France has not prevented a complicated but actually very permissive definition of ecological focus areas, supposed to ensure that a proportion of subsidies (“green payments”) are conditional upon the protection of the biodiversity.²³

Altogether the French application of the CAP has resulted in very considerable subsidy reallocation devoted to assisting stock breeders’ incomes. Recently, the emphasis has been refocused on small farms and agroecology, although the latter element has not really found concrete expression in budgetary terms. However, the fact remains that use of agricultural budgets in France too often resembles simple income subsidies, and that the long-term strategy of agricultural policy hesitates between a large number of objectives.

The piling up of ineffective and even conflicting tools

Should environmental services be directly remunerated, or should subsidies aimed at other objectives be made conditional upon compliance with environmental criteria? Although economic analysis provides an unambiguous response in favour of the former option, it is the second which has been followed in Europe, resulting in high levels of undifferentiated payments, on the condition of a few general environmental measures. France contributed to this decision. Furthermore, like many other countries, in its national application it has ensured that almost all farmers are eligible for the new CAP “green payments” without any great change in practices.²⁴ The way in which environmental conditions are applied thus tends to drastically reduce its benefits, without reducing the administrative burden of their implementation.

More broadly speaking, the lack of clear direction in agricultural policy results in measures whose effects cancel each other out. This is not specific to France; it is a weakness of the CAP that has resulted from the successive piling up of reforms constituting so many compromises, combined with seemingly lost overall vision. Current policies thus give rise to negative long-term effects: the volume of direct subsidies falling under the first pillar allows agricultural incomes to be maintained, but is ultimately capitalised in asset prices, as

3. Common Agricultural Policy: First and second pillars

Historically, the “first pillar” of the Common Agricultural Policy (CAP) covers all measures of market management (public procurement, intervention stocks, subsidies for exports and for non-foodstuff uses in order to regularise markets). Since this market management has been greatly reduced over time, the budget of the first pillar thus mostly encompasses income subsidies, the “single payment” of the reform of 2003, which became a “basic payment” in 2015 and, for farms which comply with a certain number of restrictions, a “green payment”. These budgets are almost totally financed by European funds.

The second pillar encompasses “rural development”, a vague term including agro-environmental subsidies, subsidies for the modernisation of organisations, quality, diversification of activities, etc. The budget is co-financed by the European Union and the Member State. The States (henceforth, in France, the regions) have great flexibility in the elaboration and management of these programmes. Second pillar measures are often subject to contractual or long-term programme planning and their management is therefore more complex than the first pillar. Overall, Central Europe mainly devotes its second pillar activities to support the modernisation of organisations, whereas Northern Europe prioritises environmental subsidies.

profits partly evaporate due to capital movement (purchases from retired persons, equalisation payments between joint heirs, etc.). These subsidies thus create entry barriers for young farmers. The measures introduced in order to help young people to set up a business try, in fact, to correct these distortions. Similarly, by guaranteeing a flow of income to producers, direct subsidies reduce the incentives to diversify production. They thus encourage specialisation, or even monoculture. But this kind of specialisation increases risk exposure in matters of price fluctuation and results in greater use of crop protection treatments than long-term and varied rotation of crops. The institution of a “green payment” on the condition of crop diversification is therefore a remedy to a problem that was to a large extent created by the initial policy. There are a large number of examples where policies have been created in order to address problems created by previous measures.

²² See the Parliamentary Report handed over to the Prime Minister in December 2014 by Dominique Potier: *Pesticides et agro-écologie : les champs du possible*. A new version of this Ecophyto plan presented in October 2015 introduces certificates for economy in the use of crop protection products.

²³ Hart K. (2015): *Green Direct Payments: Implementation Choices of Nine Member States and their Environmental Implications*, Institute for European Environmental Policy, September.

²⁴ The European Regulation reserves green payments (that is to say 30% of the budgetary package of the “first pillar”, around 2.4 billion euros in France) to farmers growing at least three different crops, crop rotation being a guarantee of smaller needs in terms of chemical inputs. In order to enable monocultivation of maize to benefit from the payments despite its doubtful environmental effects, France has allowed the temporary presence of (unharvested) crops between two successive maize crops to be counted as variation of crops. These green payments are also conditional upon the maintenance of areas of land protecting biodiversity by means of ecological focus areas (EFA). Although it is true that other Member States have done worse in this field, France has authorised crops manifestly lacking in ecological value to be counted as EFA.

In the face of the rapid deterioration of ecosystems, the administration argues in favour of agriculture that is both more intensive and ecological. The rhetoric poorly conceals the lack of real direction in economic and regulatory instruments. Agroecology, put forward in the recent Act on the Future of Agriculture, is a promising concept, which for a long time attracted little research. However, examples of agroecology resulting in highly productive results, while saving on chemical inputs, are often attributable to substantial substitution by labour. Yet, price ratios render this type of substitution difficult in France, unless total current subsidy budgets would be used to modify the relative costs of labour and intermediate inputs. Neither the recent CAP nor the Act on the Future of Agriculture provide for measures of this kind.

Recommendations

Some problems encountered by French agriculture are not specific to the sector: the size of structures, archaic relations between suppliers and industry, unclear market range positioning abroad, higher costs than certain competitors and difficulties in investment and innovation are problems observed in other economic sectors. However, in addition to this, agriculture suffers from policies with ambiguous effects despite their costs: more apparent lack of coordination in certain fields, first pillar subsidies that have become an essential component of incomes without any convincing logic or legitimacy and a highly interventionist State, more nit-picking than effective in its sovereign functions, such as the protection of natural capital and the creation of favourable innovation conditions.

The problem is partly European: apart from its ambition to support incomes, the CAP scarcely remedies the market failures caused by externalities and the oligopolistic structure of certain links in the chain. Yet France is contributing to this development. Its arguments in Brussels need to be rethought beyond its traditional concern with budgetary returns (all the more so since these returns are also becoming negative for agricultural expenditure). Within the room allowed by European regulations, France needs to make the choices to protect its own agriculture in the long-term.

Placing natural capital at the centre of agricultural policy

French agricultural policy needs to devote more attention to protecting its production capacity. From a long-term point of view, the deterioration of natural capital appears to be the most alarming factor. Indeed, it is often irreversible, and when this is not the case, prevention is generally easier than cure. Moreover, it risks giving rise to deferred costs that are potentially much higher than the short-term benefits. Although

these costs may materialise far beyond agriculture itself, with regard to water quality and biodiversity for example, tomorrow's farmers could be its principal victims. In future, competitiveness will be the result of good soil condition, ecosystems capable of providing productive services and ensuring the permanence and resilience of production. It is important to assert a strong will to protect natural resources by directing all action levers towards this objective. The idea that protection of the environment is a luxury in agriculture or that a "break from environmental constraints" might be needed should be clearly rejected.

France can make greater use of its national margins of manoeuvre and influence the European framework in this direction. At the national level, environmental policies need to move out of complex micro-management in order to focus on a combination of real taxation of negative externalities and results-based payments for positive externalities. Amenities should be remunerated rather than producers. Payments targeted in this way would be rather easily accessible to those farms often having low incomes and high employment levels (stockbreeding with suckling young). Therefore, giving priority to amenities does not conflict with redistributive objectives. Payments of this kind are not simple to implement. However, experiments of remunerating amenities based on performance-based conditions in several European countries provide serious possible courses of action (presence of certain species, water management).²⁵

Recommendation 1. Make the protection of natural capital a core focus of agricultural policy; target environmental performance more directly by replacing undifferentiated subsidies and environmental conditionality with remuneration of amenities. The latter could be differentiated geographically.

In practice, these kind of policies presuppose remunerating "green" (ecosystems) and "blue" (water management) services more directly, in order to protect future production. Due to the difficulties inherent to effective and fair implementation of this kind of policies, the testing of performance-based payments, potentially through collective management, for example by means of new Economic and Ecological Interest Groupings (*Groupements d'intérêt économique et écologique*), would be a useful first step. Moreover, the specific natures of territories and climates require geographical differentiation both in terms of methods and objectives. On the long run, payments to farmers for environmental services should be considered an alternative to first pillar subsidies.

²⁵ See Burton R.J. and G. Schwarz (2013): "Result-Oriented Agri-Environmental Schemes in Europe and their Potential for Promoting Behavioural Change", Land Use Policy, vol. 30, no 1, pp. 628-641 and the feedback from experience of the European MERIT programme, see Nitsch H. (dir.) (2015): Review on Result-Oriented Measures for Sustainable Land Management in Alpine Agriculture and Comparison of Case Study Areas, RURAGRI Research Programme 2013-2016, WP1 Report, February.

Creating the conditions for innovative agriculture

France's risk of falling behind in terms of innovation should not be underestimated. Synthetic biology and molecular genetics are among the major reservoirs of technical progress. New technologies enable acceleration of selection, with considerable implications in terms of nitrogen conversion efficiency and adaptation to climate change (new breeding technologies: genomic selection and production of alleles not involving transgenesis). Regulatory obstacles should not condemn France to be a passive observer of innovation, even if the risks need to be State controlled. Spatial information on practices and performances (localised mass data, collected by agricultural tools) is becoming a highly coveted strategic element. Current digital and biotechnology progress mainly supporting forms of agriculture damaging natural capital (for example, the emphasis placed upon glyphosate-resistant GMOs). Connecting these innovations with other paths which are more in line with biological regulations is an issue for public research. In order to succeed, public research needs to take an interest in production fields and systems neglected by the major private R&D operators, giving priority to sectors linked a global market in which it is easy to protect intellectual property (maize, soya and cotton). This presupposes providing the means to resist a foreign monopoly in varietal selection and, through the allocation of public funds, placing this research at the service of technical routes that are better integrated with ecosystems, at the service of adaptation to climate change and protection of natural capital.

Recommendation 2. Increase research into new selection technologies aiming at placing them at the service of agricultural form in line with biological regulations and promoting open innovation (portals, open data).

Modern agriculture requires a high level of qualification. Paradoxically, the most economical practices (organic, grass-land systems, intercropping, etc.) in terms of chemical inputs are the most complex. Today, farmers therefore need to have the skills of engineers and managers. A technical leap is therefore needed in training. Agricultural vocational lycées (even if they no longer train mostly pupils intending to go into agricultural production) need to incorporate more advanced training. These institutions are small and dispersed over a wide area, but information technologies now enable considerable

synergies. Digital technology requires heavy investment and should be a priority. While technology is undergoing rapid change, few farmers have the opportunity to undergo continuing vocational training.²⁶

Recommendation 3. Make the network of agricultural vocational lycées a pioneer in the teaching of digital technology. Enable more advanced continuing vocational training of farmers by using individual training leaves and drawing upon agricultural higher education in order to train high-level farm managers.

In addition, it would be useful to help the training profession and agricultural technical institutes to develop consultancy independently of commercial interests and to reorganise State support to technical institutions in order to promote adaptation to new demands (risk management and cover, greening of practices, quality control, etc.). Finally, it would be appropriate to render the various different actors' actions consistent in order to make this advice more cumulative and make up for poor access to consulting in certain regions and sectors.²⁷

Supporting competitiveness

At the international level, quality is above all sanitary and technical. In the food industry, reputation is above all based upon brand names. Although the Label Rouge quality assurance label and appellations of origin enable effective differentiation on the domestic market and on some neighbouring European countries' markets, they lack clarity at the international level. The guarantee of quality ensured by the traceability of French products is a major asset. Although mass-marketing operators already use this sales argument abroad, the absence of collective strategies does not enable the various fields to benefit from its full advantage. Recent Chinese investments in dairies in France and exports of processed poultry products to the Middle East, despite higher prices than the competition, suggest that it is possible to collectively "sell" French sanitary excellence more effectively. Consumers throughout the world favour meats produced without antibiotics;²⁸ concerns about the increase of obesity are international. Steps need to be taken in order to ensure that the multiple sanitary, ethical and regulatory constraints imposed by European consumers are transformed into commercial assets.

²⁶ The VIVEA insurance fund for training has existed since 2001 and devoted 44 million euros to the training of not in paid agricultural employment in 2013, for the most part by means of short training courses. Tax credits for the formation of managers of businesses are also available for farmers (6 million euros in 2013).

²⁷ See Bureau, Fontagné and Jean (2015) *op. cit.*

²⁸ A continuous flow of antibiotics are administered in certain livestock farms as growth promoters. They give rise to the appearance of resistances. The European Union prohibited these "zoo-technical" antibiotics in 2006, but the use of preventive (and of course curative) antibiotics continues. France has made major efforts and its consumption of antibiotics in animal feed has fallen by 40% since 2007 (see ANSES).

Recommendation 4. Help actors to jointly promote a small number of labels increasing the prestige of French products' assets such as sanitary controls, full traceability, absence of antibiotics and growth enhancing products, respect for the environment and animal welfare.

Current public policy hesitates between two objectives: there are great concerns about competitiveness loss, in particular in connection with the growing gap between France and its competitors in terms of organisations and technologies. But obstacles to an increase in size and the adoption of new technologies are created, in order to fight against the industrialisation of agriculture. However, industrial agriculture of this very kind is supported in the same manner as agriculture producing greater amenities. Ultimately, there is a risk of maintaining organisations that are intrinsically dependent upon public support, which will sooner or later dry up. At the same time falling back upon small-scale niche or local market-based farming would be a dead end at the national level and would leave the "high volume" market to imports. Furthermore, the fact of being environmentally friendly is too systematically seen as being associated with small-scale farming: in this respect, life-cycle analyses often yield unexpected results. The latter connection is not as direct as one might think, and it becomes increasingly less so with the high-precision farming techniques accessible to large, highly capitalised firms. In our view, farm surface area does not appear to be a pertinent criterion in the elaboration of public policies, and all the more so as it is not directly connected to job creation. It would be better to concentrate subsidies on real, duly-identified, externalities and public goods, and on policies directly targeting social objectives. Farming that does not produce these public goods is not a suitable candidate for public support, but refusing the establishment of larger scale organisations would exclude France from an almost universal movement.

Recommendation 5. Prioritise criteria directly connected to externalities when calibrating targeting of subsidies and work in favour of reshaping policy in this regard at the European level. Do not penalise size increases of organisations a priori, if they do not give rise to negative externalities (management of effluents, management of biodiversity, etc.). Promote the sharing of means of production.

Resource sharing is an alternative to the farm concentration. In this respect, the instruments of the collaborative digital economy and innovative legal structures deserve to be encouraged. More generally, the coexistence of different types of agriculture needs to be accepted –farming geared towards price, or based on appellation d'origine contrôlée (AOC) and farming remunerated by the production of public goods–, while using subsidies as a means of influencing organisations according to territories.

Revising the supporting instruments for farmers

The growth of (coupled) public support for agriculture in emerging economies and in the United States alike leaves the European Union, which has abolished those forms of support inducing the greatest imbalances, in the position of a virtuous but somewhat forsaken leader. We should probably recognize this and consolidate our tools for the stabilisation of producers' economic environment. Effective instruments still need to be put in place. Counter-cyclical subsidies send inaccurate price signals and would make it necessary to bring product-based aid back, since cycles are not in phase between the various agricultural sectors. They are no more a solution than insurance-based systems, which are potentially very costly: in spite of the arsenal of insurance-based and counter-cyclical tools, incomes of American farmers continue to fluctuate more than those of European producers, which are highly "stabilised" by direct subsidies. Crisis management tools at the European level are imperfect but France has not used all of them.²⁹ At the French level, priority should be given to tax adjustment tools for the smoothing out of economic fluctuations. Currently, some deductions (for investment in particular) give rise to ineffective tax optimisation practices and over-investment in equipment, which is often expensive to maintain. Postponement of fiscal charges for farmers facing unfavourable market conditions helps to face up to temporary occurrences, without creating a major risk of budgetary drift. At the European level, payments for public goods need to be positioned as a source of certain income, so that farmers incorporate them into their "portfolio" arbitration between certain and uncertain incomes.

Recommendation 6. Give priority to tax adjustment, or even the postponement of loans and social security contributions over several years as a stabilisation tool at the national level. At the EU level, reduce the incentives for specialisation in a very small number of crops.

²⁹ The stabilisation instruments provided for by the CAP comprise a crisis fund and, at the same time, the possibility of putting two types of mutual funds in place within the framework of the second pillar: one for climatic or biological accidents, the other for loss of revenue. For the latter, subsidies can be activated in case of revenue losses of at least 30% (article 39, EU Regulation 1305/2013). France has not used the latter possibility. For its part, the crisis fund is subject to pressure for its complete annual distribution and can hardly play an ambitious role (it was not even possible to mobilise it in the face of the crisis resulting from the Russian embargo in 2014-2015).

Today subsidies appear to be such a central part of incomes that any sudden elimination, like that implemented in New Zealand, is neither possible nor desirable. However, this should not prevent reflection on their distributional properties. Although the subsidies actually provide income support, with a social component, their current distribution is not appropriate and surface area is an unsatisfactory criterion. It would be worth incorporating a clause into the very heart of the EU texts, according to which any individual should not receive payments from the public budget in excess of a social reference, to be defined per country, and unless these payments explicitly correspond to the remuneration of positive net provision of public goods (maintaining an open landscape in mountainous areas, protecting the diversity of landscapes and biotopes, etc.), which give rise to specific costs.³⁰

Competitiveness, protection of the environment and support for incomes would no longer be conflicting objectives if farmers were considered producers of public goods and remunerated as such; and if “high-volume” producers were to develop technological and responsible farming. This presupposes revision of the mode of allocation of subsidies at the EU level, as well as implementation of policies with a long-term focus at the national level, such as an ambitious training and research policy and protection of natural capital. ●

Recommendation 7. Take action at the EU level in order to progressively reduce surface area-based subsidies (“basic payments” and “green payments”) in favour of budgets targeting public goods and social objectives. Progress towards performance-based, contractual and non-transferable payments and cap individual payments that do not remunerate the production of public goods.

³⁰ Bureau J-C. et J-C. Mahé (2008): *CAP Reform Beyond 2013. An Idea for a Longer View*, Notre Europe, gives possible courses of action in this regard. Also see SER (2008): *CAP Reform and Public Services of Agriculture*, Advisory Report, Sociaal Economische Raad, The Hague (Netherlands).



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