# Happy Tinbergen: Switzerland's New Direct Payment System

Heureux Tinbergen : le nouveau système de paiements directs de la Suisse

Tinbergen wäre zufrieden: Das neue Direktzahlungsprogramm in der Schweiz

#### Stefan Mann and Simon Lanz

#### Background

Since switching from market support to direct payments coupled with cross compliance in the 1990s (Curry and Stucki, 1997), Switzerland's payment scheme has undergone only minor amendments in recent years. This will change from 2014, as in December 2012 Parliament approved a new bill which may be of interest to other countries looking for efficient ways to pursue multifunctional agriculture.

To date Swiss agricultural policy has been based on annual general direct payments (2.2 billion francs) and on specifically environmental direct payments (600 million francs). General direct payments are partly land based and partly based on the number of livestock units of ruminants (Mann, 2003). Environmental direct payments are paid for agri-environmental programmes, for organic farming and for ethological programmes. All these payments are subject to crosscompliance. To receive any public support whatsoever, the requirements are, an even nitrogen balance, having 7 per cent of the land under conservation programmes and at least a four-level crop rotation. In a comprehensive evaluation of this direct payment system (Mann and Mack, 2004; Flury, 2005), elements of the system have been criticised both as inefficient and ineffective. Model calculations showed that livestock payments contributed to the expansion of mostly unprofitable cattle production and in the valley region even led to decreased farm incomes:



so these payments have not been effective in supporting agriculture.

A number of clear-cut objectives for agricultural policy in Switzerland were defined through a referendum in 1996: resource and landscape protection; food security; and help to encourage settlement in rural areas. The fact that the objectives were both clearly defined and democratically legitimated created a fortuitous basis for the development of an efficient agricultural policy. However, criticism was voiced (Mann, 2005a) that the political instruments available to policymakers were not adapted to directly serve the articulated objectives. In recent decades it has often been mentioned that the Tinbergen rule - policy can be efficient only if there is at least one policy instrument per objective - is constantly contravened by most if not all agricultural policies (Beard and Swinbank, 2001; Grosskopf, 2001).

Swiss agriculture, however, was a particularly suitable model for an attempt to remedy this deficiency, because of the broadly based democratic legitimising of the constitutional objectives of agricultural policy in the 1996 referendum.

The scientific criticism of policy, over the years, has been accompanied by criticism from different stakeholders. Environmentalists argued that a lot of money was being given to farmers with only the very moderate requirements of cross-compliance and demanded the implementation of a system much more strongly based on environmental accomplishments by farmers (Bosshard et al., 2011). More liberal proponents close to Swiss industry similarly criticised the large amounts of funds that were mainly conserving structures, and suggested a broad removal of subsidies (Rentsch, 2006).

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Eventually a sufficient number of decision makers both in the Parliament and in the Federal Administration were convinced that reform was due and initiated working groups in the Federal Office of Agriculture to develop a reform agenda. In communicating with social scientists about the rationale of the Tinbergen rule, it was accepted that

Chweizer Direktzahlungsprogramm stellt nichts Geringeres dar als einen historischen Paradigmenwechsel.

the clear constitutional set of agricultural policy objectives as defined by the 1996 referendum had the potential to inform the definition of adapted political instruments. A first draft reform paper was formulated which was then broadly discussed in the usual sequential arrangement of Swiss politics: first within the Federal Administration, then among the agricultural and environmental interest groups, then in the parliamentary sub-committee and finally in the two chambers of Parliament.

### New concept

The new direct payment system will come into effect from 2014 and the final details still need to be elaborated. It is clear that the current budget of around 2.8 billion francs per year will be continued and that the current element of cross-compliance as described above will be maintained. Whereas environmental direct payments will in general continue (sometimes under new labels) the current general direct payments will be mostly abolished. This applies mainly to the general per hectare payment with no requirement other than crosscompliance, and which so far has served primarily as a measure of income support. Animal-based payments for ruminants have also been abandoned, causing a lot of criticism in a country whose agriculture is traditionally

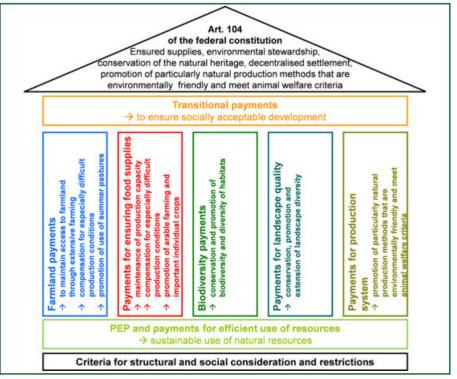
characterised by cattle and goats (Schweizerischer Bauernverband, 2012). The new elements are welldefined already and the main types of payment, depicted in Figure 1, can be summarised as follows:

- The great bulk of payments will be handed over through *Payments for* **Ensuring Food Supplies**. These are per-hectare payments, differing between valley and mountain regions; mountain region payments are higher because farmland there is more in danger of being given up. On permanent grassland the payments require a minimum density of ruminants held. These payments for Ensuring Food Supplies are the main reason why, according to model calculations, the mountain regions will do slightly better than valley regions in the future. However, arable land gets higher payments than grassland, because more calories are produced on this land.
- *Farmland Payments* follow a similar rationale to Payments for Ensuring Food Supplies, being paid on a per-hectare basis. Their level depends on the likelihood that the agricultural land-use will be abandoned. Flat valley regions will not benefit from Farmland Payments, while payments for

Alpine Farming will increase and extra payments for steep areas will also be paid on the lowland.

- While conventional agrienvironmental programmes were introduced in the 1990s in Switzerland, output-based payments (based on the number of rare species to be found in the meadows) accompanied these programmes in 2001 (Mann and Reissig, 2011). The output-oriented element of agri-environmental policy will be strengthened through the *Biodiversity Payments*, which deliver three different levels of land-based payment for each agri-environmental programme, dependent on the level of environmental quality of the land.
- For the preservation, promotion and extension of landscape diversity there will be *Payments for Landscape Quality*. These payments are project-based and have therefore to be co-financed by the canton at a ratio of at least 20 per cent. The Payments for Landscape Quality will focus on the aesthetic services of agriculture. Possible measures that could be supported are a more diverse crop rotation, flowering fields or the maintenance of traditional agriculture practice

#### Figure 1: Overview of the new Swiss system



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such as forest pastures or cereal production in mountain areas.

- In the beginning of the conceptual phase, the focus on single objectives led to the suggestion that payments for organic farmers be skipped, as organic farming should be remunerated via the single environmental programmes. The subsequent discussion led to the concept of Payments for Production System. These are now to be used for organic farming, for the enhancement of grasslandbased milk and meat production (with a limited share of concentrates in the feed ratio) and for animal welfare programmes.
- **Resource Efficiency Payments** are introduced for the promotion of technologies that boost the efficiency of resource use in agriculture such as the umbilical hose slurry spreading technique and soil-conserving production methods, for example direct seeding.
- As a social policy measure, *Transitional Payments* are (over time decreasingly) compensating farmers who will lose direct payment support with the change to the new system. They will benefit relatively intensive farms which took advantage of their high animal density.

In general, the result of a political negotiation process rarely looks like a system designed by academia, and Swiss agricultural policy reform proves no exception to that rule. While scientists played a certain role in the design of the system, it was also strongly influenced by a large number of different stakeholders, ranging from ecologists through organic associations to lobbyists of the Farmers Union. It has to be acknowledged, however, that at least the labeling of the new payments pays a clear tribute to the Tinbergen rule. Ensuring food supply for example is an explicit constitutional objective of agriculture; therefore Payments for Ensuring Food Supplies will be made to farmers in return for this service. Landscape preservation is a well-defined objective, so there are two payments on different levels for that. This principle can be transferred to many if not all of the payments.



A closer analysis of the new system shows that two paradigms compete in Swiss agricultural policy, the cost and the output paradigm. The traditional paradigm focuses on the costs of a measure. An historical analysis has shown that for a long time Swiss farmers have been reimbursed for their production costs, no matter what the activity (Mann, 2006). This paradigm was, for a long time, responsible for maintaining arable farming in the mountains where it was, of course, highly unprofitable, as farmers received prices defined by the costs of producing wheat or potatoes in the

Le nouveau système de paiements directs suisse n'est rien moins qu'un changement de paradigme historique.

mountains. The output paradigm, on the other hand, attempts to reimburse farmers for the value of the output they provide. This can be generated by the market price and quantity equilibrium or by some aggregated willingness to pay for non-market commodities.

The struggle and the contradictions between these two paradigms can be illustrated by the new *Payments for*  Ensuring Food Supplies. The fact that arable land gets a higher level of payment than grassland is well reasoned by the output paradigm: one hectare of arable land 'buys' more food supply than one hectare of grassland. But the fact that payments in the mountain zone are higher than in the lowland is only explicable by the cost paradigm: it costs more to farm a hectare uphill compared to downhill, and therefore farmers receive more money. One could also interpret the cost paradigm as an attempt to preserve traditional structures and to balance economic development.

Critics may denounce the system as being old wine in new skins. In fact, as most payments are hectare-based payments, the Swiss system ends up being not too different from the CAP where likewise most payments are hectare-based, and there are indeed indications that both approaches influence each other. However, although the design of the new Swiss direct payment system is strongly shaped by vested interests and compromises and hardly invents new modes of reimbursing farmers, nevertheless it is nothing short of an historic paradigm change. It is the first time that the multifunctionality of agriculture, the range of non-market objectives, has been closely translated into a set of political instruments. The message for farmers is clear: you do not get money because you are a farmer and enjoy eternal protection,

26 **±** EuroChoices 12(3)

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but because you deliver important non-market commodities which society demands.

## Rational multifunctional policy design

Except for the few revolutions in history, political change usually comes in small portions. This has been the pattern in the 1990s in the European Union when market support was replaced by direct payments, but when many of these payments were still dependent on what was produced, and land-use patterns were only slightly influenced. Nevertheless, few agricultural economists today would disagree that the step towards direct payments at that time had an historic dimension.

Similarly, model calculations (Zimmermann *et al.*, 2011) have shown that the structure of Swiss agriculture will not change greatly through the new system, albeit fewer animals will be kept and income is

## The new Swiss direct payment system is nothing short of an historic paradigm change.

expected to rise. For many farms, life after 2014 will be about the same as before. And some contradictions to the Tinbergen principle will remain. Foremost, this concerns the principle of cross-compliance. Coupling public support to high environmental standards enjoys great popular support because farmers are seen to be doing something for the environment in exchange for receiving payments (OECD, 2010). But cross-compliance has repeatedly been shown by economists to lead to inefficiencies by mixing the objective of environmental sustainability with the objective of income support for farmers (Latacz-Lohmann and Buckwell, 1998; Mann, 2005b).

Nevertheless, the Swiss direct payment system will be the first to label all public transfers as targeted to single societal deliveries. That may not change too much in the first instance. It will become easier, however, to carry out systematic evaluations now that the policy objectives have been made much more transparent. In turn, this will make it easier to adapt agricultural policy to the changing needs and preferences of the Swiss population. Therefore the reform currently taking place in Switzerland may, in the long run, turn out to be an historic one as well as providing a model for the rational design of a multifunctional agricultural policy.

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# Summary

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Since the 1990s, Switzerland's agricultural policy has relied on land- and animal-based direct payments being subject to crosscompliance. Both scientists. environmentalists and industry representatives have criticised this system for handing out support without a strict orientation on the constitutional goals of Swiss agriculture. The Swiss Parliament has recently enacted a new direct payment system which, from 2014, assigns societal objectives to each kind of payment, paying tribute to the Tinbergen principle according to which each objective has to be followed by at least one instrument. Payments for Ensuring Food Supplies, for example, will be paid per hectare dependent on the production capacity, Biodiversity Payments will be paid only for land with a lot of species on it. Animal-based payments which still play an important role today are being abandoned. Although the new system is neither changing the amount of money transferred to farmers nor expected to rapidly change the structure of Swiss agriculture, it is argued that the system change may well be historic, because it makes societal transfers to agriculture more prone to critical analysis and evaluation and because it shows for the first time what the application of the Tinbergen principle to multifunctionality policy design could look like.

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O Depuis les années 1990, la politique agricole suisse s'appuie sur des paiements directs fondés sur la superficie et la garde d'animaux assortis de conditions. Des représentants des milieux scientifique, environnemental et industriel ont tous critiqué ce système qui accorde des paiements aux agriculteurs sans lien étroit avec les objectifs constitutionnels pour l'agriculture suisse. Le Parlement suisse a récemment voté un nouveau système de paiements directs qui, à partir de 2014, attribue des objectifs sociétaux à chaque type de paiement, suivant ainsi le principe de Tinbergen selon lequel à chaque objectif correspond au minimum un instrument. Les contributions à la sécurité de l'approvisionnement, par exemple, seront versées par hectare en fonction de la capacité de production du terrain. les contributions à la biodiversité ne seront attribuées qu'aux terres abritant de nombreuses espèces. Les paiements au titre de la garde d'animaux, qui sont encore importants à l'heure actuelle seront abandonnés. Le nouveau système ne changera pas le montant des versements aux agriculteurs et ne devrait pas changer rapidement la structure de l'agriculture suisse, mais nous avançons qu'il pourrait s'agir d'un tournant historique car il rend les transferts sociaux plus ouverts à l'analyse critique et l'évaluation critique et parce que, pour la première fois, il montre à quoi pourrait ressembler le principe de Tinbergen appliqué à la multifonctionnalité.

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Seit den 1990'er Jahren beruht die Schweizer Agrarpolitik auf land- und tierzahlabhängigen Direktzahlungen, die Umweltauflagen unterliegen. Sowohl Wissenschaftler. als auch Umwelt- und Industrievertreter haben dieses System kritisiert, weil die Schweizer Landwirtschaft ohne klare Orientierung an den Verfassungszielen unterstützt wird. Jüngst hat das Schweizer Parlament ein neues Direktzahlungssystem beschlossen, das ab 2014 jeder Direktzahlungsart ein gesellschaftliches Ziel zuordnet und damit die Tinbergen-Regel befolgt, wonach jedes Ziel mit zumindest einem Instrument erreicht werden sollte. "Versorgungssicherheitsbeiträge" beispielsweise werden für Fläche in Abhängigkeit der jeweiligen Produktionskapazität gezahlt, "Biodiversitätsbeiträge" nur für Land mit einer hinreichend hohen Artenvielfalt. Die Tierhalterbeiträge. die heute noch eine grosse Rolle spielen, werden abgeschafft. Das neue System verändert zwar weder die Höhe des Gesamttransfers in die Landwirtschaft noch die Schweizer Agrarstruktur radikal, Dennoch könnte es sich um einen historischen Systemwechsel handeln, da er die öffentlichen Transfers an den Agrarsektor offener für kritische Analysen und Evaluationen macht und er zum ersten Mal zeigt, wie eine konsequente Umsetzung des Prinzips der Multifunktionalität aussehen könnte.