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# Organic and alike farming in Latin America: state and relevance for small-scale livestock keepers

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#### Abstract:

While the organic movement is growing, its contribution to small-scale livestock farming in Latin America is contentious. Secondary literature and available statistics were used for this study. Farms and area under certified organic agriculture are rising, but small-scale livestock farming is little represented. The latter is yet to be found in noncertified organic-like farms, offering locally adapted paths to securing livelihoods.

### Introduction and Objectives:

The forms and approaches of organic agriculture are quite heterogeneous and a clearcut definition of what "organic" includes is lacking. Even though there is an umbrella organisation for organic agriculture in the world, IFOAM, its leadership is questioned. It seems to follow a "Western-oriented" concept because of historic roots and development of the organisation. Harmonisation processes are established and the international discourse is more and more oriented towards regional realities all over the world, in particular including developing countries in the tropics and subtropics. However. a dominance of Western concepts is still being perceived by stakeholders from developing countries. The organisation's actions are basically directed by the aim to improve the contribution of developing countries to world markets, thus emphasising certification and subsequent export of produces. On the one hand this may increase the options of farmers, and here especially poor households, to raise their income. On the other hand export-based production bears the threat of dependence on world markets and does not contribute to securing local markets and livelihoods by supplying food, non-food products and services. In this paper, Latin America will be taken as a case to compile different approaches of organic and alike livestock farming and to assess their relevance to smallholdings with livestock.

#### Methods:

A secondary literature search, including grey literature, was performed. Web-searches were carried out to detect different practical examples which were not (yet) published in scientific journals. Categories of approaches were established, and their importance exemplarily outlined for two countries, namely Brazil and Bolivia.

### **Results and Discussion:**

The documented contribution of Latin America to worldwide organic farming is relatively high as it makes up 20% of the worldwide certified land and shows highest continent contribution in terms of farms (YUSSEFI 2006). The estimated share of pastures to worldwide organic land use is about half of the certified area. The authors however mentioned that databases are incomplete. At best formally certified areas can be quantified. The registered land area under organic management increased 11-fold from 2000 to 2006 (Tab 1). Unlike the numbers of members and associates of IFOAM, which decreased by 23% from 1994/95 to 2006.

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Average country data under organic management give a clue to types of systems involved. Argentina e.g. includes extensive rangelands with large-scale livestock farming. In a small country like Uruguay, already few farms can make up a high share of organic land area. Both countries account for more than half of the organic land in Latin America. As they are known to also sell produces like cereals and mate tea, the remainder of pastures will be found in Brazil (see below) and Chile besides its organic fruit production. Yet, the bulk of farms, mainly smallholdings, is to be found in countries with average farm sizes smaller than 100 ha, such as Mexico, Peru, Brazil and Bolivia. Most of those countries supply international markets with their organic crop production. Almost nothing is known however on livestock practices in mixed farms certified for selected crops.

Tab. 1: IFOAM member organisations, certified organic land area, and number of certified farms in Latin American countries.

	Members (n)			1,000 ha			- % of land -		Farms(n)	ha/farm
	'94/95	2006	Diff.	2000	2006	Diff.	2000	2006	2006	2006
Argentina	12	11	-1	380.0	2,800.0	x 7	0.22	1.58	1,824	1,535
Belize	0	0	0		1.8			1.19		
Bolivia	4	3	-1	8.0	364.1	x 46	0.02	0.99	6,500	56
Brazil	9	5	-4	100.0	887.6	x 9	0.20	0.34	14,003	63
Chile	5	2	-3	2.7	639.2	x 237	0.02	4.19	1,000	639
Colombia	5	4	-1		33.0			0.07	4,500	7
Costa Rica	1	3	2	9.0	13.9	x 2	0.31	0.49	3,987	3
Cuba	2	0	-2		10.4			0.16	5,222	2
Dominican Rep.	0	1	1		72.4			1.96	819	88
Ecuador	3	2	-1		27.4			0.34	2,427	11
El Salvador	1	0	-1	4.9	9.1	x 2	0.31	0.53	37	246
Guatemala	2	4	2	7.0	14.7	x 2	0.16	0.33	2,830	5
Guyana	0	0	0		0.1			0.01	28	4
Honduras	0	0	0		1.8			0.06	3,000	1
Jamaica	0	0	0		1.3			0.26	12	111
Mexico	9	10	1	50.1	295.0	x 6	0.05	0.27	120,000	2
Nicaragua	1	1	0		59.0		0.02	0.83	-	
Panama	0	0	0		5.2			0.24	7	749
Paraguay	2	2	0		91.4			0.37	2,827	32
Peru	10	5	-5		260.0		0.04	0.85	23,400	11
Trinidad & Tobago	1	1	0		0.1			0.06		
Uruguay	0	0	0	1.3	759.0	x 584	0.01	5.10	500	1,518
Venezuela	4	1	-3		16.0	•		0.07	4	4,000

Note: IFOAM members include both members and associates. Country data for land area (ha) and share of total agricultural land (%) are from 1997 instead of 2000: Bolivia, Costa Rica, El Salvador, and Mexico. Sources: IFOAM 2006, YUSSEFI 2006, WILLER & YUSSEFI 2000, IFOAM undotatd.

Large organic producers in Mexico were found to increasingly benefit from established certification systems while hampering the marketing chances of smallholdings (GÓMEZ TOVAR et al. 2005). This can partly be explained by the fact that certification primarily acknowledges current products rather than whole farming systems, long-term planning and underlying producer concepts (GONZÁLEZ & NIGH 2005).

### Non-formalised organic farming:

Besides the formalised organic farms, other types of farm organisation co-exist that similarly deserve consideration in organic and alike land use. The expected range is broad from only using different terms for the same facts to clear discrepancy in the underlying approaches. Thus, it is hardly possible to actually estimate the magnitude of what can be considered "organic" livestock farming.

Two major groups of organic and like-minded agriculture are commonly distinguished, namely certified and non-certified organic farming (PARROTT et al. 2006, CACERES 2005, IFAD 2003, SCIALABBA & HATTAM 2002). Very few scientific articles deal with livestock systems under organic or alike management in Latin America. A database search (Scopus) on the various organic and alike approaches plus livestock plus Latin America did not yield a single scientific article, whereas simultaneously produced web hits were almost 13900 for traditional, 8600 for low-external input, 6200 on certified organic, 3200 on wild harvested, 1700 on agro-ecological, and only 200 on noncertified organic approaches.

The following types of organic and alike livestock farming are suggested, mainly based on books and project reports.

- i) Certified organic farm: certified by IFOAM accredited or non-accredited certification body. The certification is either related to a farmers' association such as the biodynamic group and therewith emphasising a process-based view, or simply meant for trade without identification with a farmers' association and thus generally following a product-based approach.
- ii) Non-certified organic farm: not officially certified as organic, but similarly run farm,
- iii) Agro-ecological farm: based on agroecology, sometimes in opposition to certified organic, if in accordance then more or less covered by the certified or non-certified organic type,
- iv) Traditional farm: farms that are managed organic-like, but principally not with an attempt to be an organic farm,
- v) Wild collection: hunting (game) or gathering (honey) in an environment declared as almost undisturbed,
- vi) Low-external input agriculture: emphasis on a large degree of self-sufficiency in farm inputs therewith promoting internal recycling,
- vii) Green production: a pasture-based feeding system where the pasture management may but does not necessarily follow an organic approach,
- viii) Locally branded production: pursuing a territory concept in order to promote a speciality following production procedures strictly adapted to local conditions.

A clear distinction between the types is not always possible due to partial or complete overlaps as well as inconsistent uses of the terms.

#### Types of organic and alike livestock farming in Brazil:

Organic livestock farming in Brazil is very heterogeneous like its large area with different social, economic and ecological frame conditions. The consumer demand for organic products is assumed to be higher in urban than rural areas and increasing towards the south of the country. Popular fairs exist with a small range of organic or alike animal products. Formal certification is less relevant where those fairs offer direct producer-consumer contact. While on the one hand few farms are engaged in the international organic poultry and honey trade, on the other hand there are organic-like managed farms with no direct connection to world markets. The latter are partly being assisted by NGO's and national research centres, inspired by organic principles and partly aiming at improving livestock farming in drought-prone semi-arid regions of the North-East. Recently, a locally branded goat production scheme has been suggested (HOLANDA JÚNIOR 2005). Green production might in some cases meet organic principles whereas in general its similarity with organic farming is rejected. The formally registered organic livestock enterprises are again prevailing in the south, where for instance a number of organic dairy associations exist. Governmental support increased recently, however again favouring export production, as demonstrated during BIOFACH fair 2005 at Nuremberg, Germany.

#### Organic versus traditional livestock farming in Bolivia:

Frame conditions are similarly heterogeneous in Bolivia. The connectedness to world markets is however, till now, restricted to crop production, and governmental engage-

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ment seems to be comparatively insignificant or inexistent. Traditional mountainous farming is expected to widely correspond to organic principles, if not even going beyond the minimum standards in some aspects. Fibre of camelids is already occasionally traded as a product of quasi-organic origin, whereas lack of assured market chains is still hampering its broader dissemination. Integration of organic approaches with traditional farming could offer promising ways to cope with difficult environments under climatic and socio-economic stress.

#### Conclusions:

Certified organic livestock keeping is widely restricted to extensive large-scale ranching and small to medium scale dairy cow farming, mainly in southern parts of Latin America. Bee keeping enterprises are an exception to this. Those systems at least partly benefit from premium prices by serving specialised markets. However, in tropical and subtropical regions, another major function of organic livestock farming could be to better adapt to adverse bio-physical conditions. Whether certified organic farming really meets the declared claims remains unproven in the target region und thus, it's often assumed ecological, economic and social superiority over uncertified production systems could not be proven so far. Reflection on core aspects of organic farming, across the various approaches, could help to better appreciate the role of livestock and to refine management practices of farm systems having evolved in congruence with local resources and conditions.

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