

Part I

**Disciplinary approaches and
theoretical reflections**

2 Transformations of common pastures and woodlands in Switzerland: A historical perspective

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The diversity of the Swiss commons landscape and the current importance of collectively regulated Alpine pastures and forests in Switzerland can only be understood historically. In this chapter we look for historiographical points of departure and propose a two-dimensional temporal structure from a long-term perspective, which we carry out using the general Swiss development (Sections 2.2 and 2.3) and which will then be refined in the regional case studies (Chapters 5 to 9).

2.1 Historiographical starting points

Municipal dualism is one of the essential particularities of Switzerland. In many places there is not only a *Politische Gemeinde* (municipality of residents), but also a Corporation of Citizens. There are different names for the latter, in different cantons, such as *Bürgergemeinde* in the Cantons of Basel, Grisons, Solothurn and Zug; *Bürgergemeinde* in Oberwallis and Bern; *Orts(bürger)gemeinde* in Aargau, St. Gallen, Thurgau and Uri; *bourgeoisie* or *commune bourgeoise* in Freiburg and Unterwallis; as well as *patriziato* in Ticino. There are no Corporations of Citizens in Geneva, Neuenburg, Waadt, Zurich, Nidwalden or Schwyz, although in the latter two cantons there are *Korporationsgemeinden* (corporation municipalities). Other examples of cantons which still have corporations under public law are Appenzell, Glarus, Obwalden, Uri and Zug.

These Corporations of Citizens and other corporations under public law as *Genossame*, *Teilsame*, or *consortage*, being successors to the former commons, own local lands, woodland and real estate. Their sociological core elements are the ancient families who were already politically and economically privileged during the *ancien régime*. Their maintenance and renewal is based on inheritance and marriage, and on applying for and purchasing the status. Although the number of new members through birth and marriage cannot be affected, the Corporations of Citizens and other corporations under public law are provided with a means of control through the right to grant (corporation) citizenship (i.e. membership) (Head-König 2003, Sieber 2005, Head-König 2015, Stalder/Stuber 2015, Head-König 2019).

It is not only their names, but also their degrees of organisation, their rights and activities, which distinguish these corporations from each other. In its commemorative publication for its fiftieth anniversary, the Swiss Association of Corporations of Citizens and other corporations wrote that in all of Switzerland there were some 2,000 corporations under public law. The Association states that these corporations are not subject to federal law, but exclusively to canton law, which is so different from canton to canton ‘that not one canton could be found where there are just ten corporations of citizens, corporations or patriciates which are identical with each other’ (Göpfert 1994: 15).

The only author, for the time being, who has made the attempt to provide a comprehensive overview of this variety of legal forms for all of Switzerland is August von Miaskowski. In his classical work *Die Schweizer Allmend in ihrer geschichtlichen Entwicklung* (1879) he compares Switzerland to a ‘laboratory and a research ward for social policy’ where, in some cantons, ‘a wide share, indeed the biggest share of productive soil is still collective property, as in our time it is otherwise only to be found in Russia’. Miaskowski bases his comparative study on a spatially differentiated list of questions in order to obtain a view of the subtle differences of the commons law, which he believes to be crucial when it comes to social-political effects. For example, he asks for each region, ‘that non-citizen residents are also provided with full or at least quoted shares of the utilisation of commons’, ‘that utilisation is distributed in kind or also in money’, and ‘that those commons plots are distributed long-term or short-term or lifelong or even hereditarily’ (Miaskowski 1879: VII, XIII).

This Switzerland-wide comparative research design is still inspiring today, although it was not then adopted by historical research. Whereas there were older traditions of researching common property in Alpine regions in France and Italy, in German-speaking countries the research of collective property focused on the distribution of commons in the course of the transition to modernity for a long time (see Suter 1998). Accordingly, these studies mostly dealt with lowlands where the transfer from collective to private property was marked. Common property, which existed on a large scale, mostly in mountainous regions, was clearly less the focus of historical research and was mostly limited to local studies giving an insider’s view of the institutions concerned.

Dealing with common property in the Alpine region was newly stimulated by Elinor Ostrom’s *Governing the Commons* (Ostrom 1990), which indeed basically rested on Swiss examples, that is on the Valais community of Törbel (Netting 1981). The growing international interest in Swiss commons served as a stimulation for once again examining the whole variety of the phenomenon, beyond the classical example of Törbel. Referring to Ostrom’s classical work and her further developments, a number of analyses were presented, mostly addressing the collective utilisation of resources in the twentieth century (Gerber et al. 2008, Baur and Binder 2013, Tiefenbach 2013, Landolt and Haller 2015, Landolt 2019), but also from a *longue durée* perspective beyond this time frame (Schläppi 2007, Stalder/Stuber 2015, Schläppi 2018, Schläppi 2019).

We also make use of Elinor Ostrom's conceptual considerations as analysis tools for the comparative analysis of the landscape of Swiss commons in our case studies, that is the eight design principles which, according to Ostrom, support the robustness of collectively cultivated local resources. These famous principles are supposed to serve less as a fixed research programme for our case studies, however, and more as a source of multiple inspiration. The clear distinction between legitimate users and those who are not entitled to benefit from the resources of the corporation, which is given as a condition (Principle 1), raises an awareness of the exclusion or inclusion of groups. The criterion of regulations being adjusted to local conditions (Principle 2) directs our attention to the natural-spatial compatibility of utilisation. The postulated common decision-making regarding utilisation regulations (Principle 3) leads to questions about the forms of participation. That those actors entrusted with supervising the resource are themselves users or accountable to users (Principle 4) prompts an analysis of the division of labour and communication within the organisation. The intended appropriateness of sanctions (Principle 5) supports a differentiated analysis of the enforcement of levelled sanctions. The demand for mechanisms of conflict-solving that work directly (Principle 6) sharpens our view of the changing cultural, political and legal ways of conflict-solving. The need for a minimum degree of state recognition for collective utilisation rights (Principle 7) directs our attention to the interactions between commoner organisations and superior state authorities. The idea of several levels of interwoven governance structures (Principle 8) motivates a precise reconstruction of local constellations.

2.2 The institutional development of the Swiss 'landscape of commons'

We suggest a structuring of the long-term perspective on the history of the corporations into four phases: their formation in the Late Middle Ages (ca. 1250–1500), consolidation in the Early Modern Period (ca. 1500–1800), transformation in the nineteenth century, and the adoption of new roles in the twentieth century.

Formation in the Late Middle Ages

With the help of historical documents most of the commons organisations that still exist in Switzerland can be traced back to the Late Middle Ages. Although the early organisations are different from the current forms concerning their tasks and their social influence, this long history provides them with a reputation, especially in the context of the current sustainability debate.

From 1250 to 1500, in the region of today's Switzerland – as elsewhere in Europe – numerous associations of persons arose, which independently regulated the exploitation of their environments as well as of areas outside their immediate territories. They were diverse types of organisations: neighbourhoods, villages, valley communities, cities, brotherhoods, parishes, guilds and

cooperatives. Their common property might be an alp or the woods, pastures and waters around a settlement; it could be buildings, roads, weirs (water-courses, flood protection devices); or other kinds of infrastructure. Often their sphere of action was limited to the local; however, some operated cross-territorially – such as the cooperatives of teamsters which were active in transport (Steiner 2013, Burmeister 2015, Stadler 2015).

Many of these organisations appeared in documents at this time by way of regulations where they declared their claims to territories, competences or power. The intention of these organisations to structure both their space as well as the people living there, and to work in a stabilising way, becomes obvious from these written sources. The competence of sanctioning violations of rules was thus crucial for their profile. Parallel to their attempts at securing peace, court files document the many conflicts with which they were confronted – both internally and with other corporations or superior authorities (worldly and clerical feudal lords).

Delimitation from the outside was the *raison d'être* of the associations. Population pressure was comparably low, but the supply of resources in an 'agrarian society' was far from being stable and could immediately become precarious. The exclusion of outsiders was thus a matter of self-protection; however, it went in cycles, for at the same time workforce, financial means and social networks of incomers were welcome goods. There are regions where the circle of those entitled to use local resources was not definitively legally fixed far into the Early Modern Period. Not only family relations or the length of habitation but also the socio-economic position could open up prospects for participation (Carlen 1988, Blickle 1990, Roth 2018).

The diversity of today's commons organisations in Switzerland is a product of its medieval origins, in so far as these organisations developed in the context of the variety of political structures in those days. According to the regional centres of power, the corporations enjoyed different degrees of autonomy and were able to become more or less politically weighty. The villages west of the Saane river – then in the sphere of influence of Savoy and today's French-speaking parts of Switzerland – tended to be less autonomous than the places east of the Saane. It is also typical of the 'commons landscape' that the mountainous regions were less subject to manorialism than the lower areas (Mittelland), which supported the establishment of local self-administration. The main factors in this respect are that these regions were less profitable for the manorial system. Accordingly, the rulers' political-economic emphasis was elsewhere – the Habsburgs' emphasis, for example, as the most influential dynasty in the territory of today's Switzerland, was on the rising cities in the Mittelland (Sablonier 2008, Steiner 2013).

The establishment of community self-administration should not be interpreted as an anti-feudal act, but at least in the beginning it was closely connected to manorialism. Land development in the Late Middle Ages, that is the development and clearing of new settlement and agricultural areas, was supported by the landlords; for example, by offering extended self-administration

rights (colonists' rights). Later, commons organisations purchased land and utilisation rights from noble families and clerical landlords. Not least, the administrative staff of the feudal system, acting as the local representatives of the landlords, often played a leading role in establishing local comoners' organisations (Sablonier 2008).

Consolidation in the Early Modern Period

Three fundamental changes in communities and corporations with collectively owned property at the political-legal level can be seen in the Early Modern Period (ca. 1500–1800). First, there is evidence for the transfer of commons into private property from the fifteenth century on, mainly in the hill country. In the sixteenth and seventeenth centuries this development increased in the form of partial distributions and reached parts of the lowlands as well. In the eighteenth century the Economic Enlightenment spoke out vehemently in favour of distributing the common lands in the lowlands which, however, was not realised until the course of the nineteenth century (Leonhard and Mattmüller 2001). As a result of these developments, today we find collectively owned property mainly in the Alpine regions and the Alpine foreland.

Second, the significance of the local communities became stronger. In 1551 the *Eidgenössische Tagsatzung* (Swiss Meeting of Representatives) had decided that each community had to take care of its own poor. To protect from the claims of too many applicants, it was necessary to define, by way of granting *Heimatrecht* (citizenship), who was a member of the respective community and who was not. From then on, the citizenry consisted of those who might claim to be entitled to poor welfare; and the *Hintersassen* (socmen), on the other hand, who were excluded from poor welfare at their places of residence. The policy of granting citizenship and social policy thus had to be adjusted to each other. In the course of a lengthy process, community poor welfare started pushing through in the different Cantons of Switzerland, such as in the Canton of Bern, with the Beggars' Statutes of 1664. The goal was support for the poor at the place where their needs were well known, while, on the other hand, limiting their mobility and keeping them where they could be more easily controlled. This policy only gradually pushed through in Switzerland, at first in the cities, and then also in the rural areas (Head and Schnegg 1989, Flückiger 2002).

Third, given the population growth as well as the growing pressure on food supplies and opportunities for making a living in agriculture, crafts, trades, government and administration, as well as the problems of welfare policy, these communities and corporations became increasingly socially exclusive. Newcomers were prevented from claiming citizenship and were only granted the status of *Hintersassen* (socmen), with very limited utilisation rights. Since the sixteenth and seventeenth centuries the local citizenries had increasingly attempted to limit entitlements to the ancient families and shaped their

citizenship and utilisation policies accordingly. Poor welfare, common land and the most important political positions were supposed to be protected against too many aspirants. Furthermore, full citizens started to become further differentiated themselves. Finally, in many places only a small minority of entitled families – the village aristocracy or the urban patriciate – could participate in political decision-making (de Capitani 2001, Holenstein 2014, Head-König 2015, Stadler 2015).

Transformation in the nineteenth century

The invasion by the French and the Helvetic Revolution of 1798 marked the end of old Switzerland. Despite the postulated principles of liberty and brotherhood, however, the *Helvetik* created a municipal code based on the inequality of the *ancien régime*. By way of a dual municipal organisation, with a municipality of residents and a Corporation of Citizens, it exclusively attributed the common lands and the other assets of the community such as treasure, real estate and the *Armengut* (property for the poor) to the latter. Historian Daniel Schläppi interprets this process as a pragmatic compromise: ‘In terms of revolution, it was easier to behead a king [...] than to remove property which was firmly rooted within the population or to shatter local corporative utilisation systems and cycles of collective resources.’ The locals used their considerable political weight to reserve the corporation goods exclusively for themselves. The newly established canton authorities also wanted to root the Corporations of Citizens and other corporations within the new law, so that they would continue taking over public tasks, thus relieving the state (Leonhard and Mattmüller 2001, Stadler-Planzer and Stadler 2008: 437, Schläppi 2011: 65).

In the decades to follow there were many changes back and forth in many cantons. In the periods of the Mediation (1803–1813) and Restoration (1813–1830) the municipalities of residents were abandoned again and political rights were limited to full citizens or full members of corporations. Only with the liberal turnaround of the Regeneration (1831–1846) did the resident principle push through once again, which in most cases resulted in definitively installing municipal dualism. Various cantons developed differently, however. Equal rights for Swiss resident citizens concerning all municipality matters were only stipulated by the Federal Constitution of 1874 (Sieber 2005, Ladner 2013, Holenstein 2014).

Adopting new roles in the twentieth century

The commons organisations in Switzerland in the twentieth and twenty-first centuries still vary greatly in their organisation and fields of activity. Many of their former tasks have been taken over by the now dominant political organisations of the Federation, canton and municipality (of residents), while at the same time the local scope for action has been reduced by nationwide state laws.

Some of the associations of persons originating from the Late Middle Ages (e.g. neighbourhoods, brotherhoods, specific cooperatives) have sunk into insignificance and been dissolved. Landed property is crucial to the survival of the remaining commons organisations.

Most of those corporations still influential today are organisations under public law. Cooperatives under private law, such as Alpine cooperatives, tend to own smaller areas, and their field of activities is limited to specific actions. The political weight of the organisations under public law becomes obvious, by the Swiss Association of Corporations of Citizens and other corporations (SVBK) which was founded in 1945, and today (2018) consists of 13 cantonal associations and 62 individual members (Schneider 2019).

Apart from the structuring of today's commons organisations into those under public law and those under private law, Swiss social anthropologist Arnold Niederer has suggested another categorisation (Niederer 1991). He developed three types of the broad range of organisations based on the different ways of utilising their landed property:

- a) Agricultural collectives for which the utilisation of commons and commonly owned woodlands still has a real function
- b) Urban Corporations of Citizens of the patrician kind, whose activities are mostly oriented towards the common good and towards culture
- c) Corporations of Citizens and other corporations making use of their landed property for commercial purposes.

This classification cannot be understood disjunctively. Many corporations by their nature combine two or more of these basic types at the same time, and in the course of history they may transfer from one type to the other.

Despite a centuries-long shrinking process, which in some regions started as early as in the fifteenth century, commons are thus still of considerable size in certain mountainous regions. It is no coincidence that, when it came to determining the SCALES case studies, for which vitality, social relevance and landed property were crucial criteria, it was examples from mountainous cantons that were selected. It must be noted, however, that there are also strong corporations in the Mittelland, among them the *Bürgergemeinden* of the cities of Bern, Basel and Fribourg, or – as a comparably well-known rural example – the *Korporation Pfäffikon*. There, as in the case of many rural corporations in the Mittelland, the tasks mostly involve the granting of citizenship and the administration of buildings such as hospitals, former orphanages, and so on. Furthermore, most Corporations of Citizens and other corporations both in the Mittelland and the mountain regions are also owners of woodlands, which is why the Association of Swiss Woodland Owners is one of the most important partner organisations in the SVBK. Alpine pastures, which are common in the mountainous regions, are less significant for the SVBK (Göpfert 1994, Stadler-Planzer and Stadler 2008, Stalder and Stuber 2015).

In the twentieth century several trends forced the commons organisations under public law to adjust their political-social positioning. The spatial mobility of the population clearly increased in the second half of the century, as a result of which the social and legal relevance of a person's place of origin has become less significant. Poor welfare has been delegated to the municipalities of residents. The proportion of people working in agriculture has drastically declined, which is of great significance when it comes to maintaining the natural resources. Not least, the woodlands and Alpine pastures administered by people working in agriculture have continually lost financial value since the mid-century.

Three main strategies can be identified as a reaction to these challenges. The first involves continuing with those activities which are still possible, which requires a high degree of adaptability given the many changes to the management of assets in the course of economic development (e.g. the modernisation of forestry and agriculture). Second, there have been conversions, or at least shifts of emphasis, in the administration of assets. Buildings on alps which are no longer used for agriculture are, for example, converted into mountain restaurants; former city pastures are converted into building land and built on; or waters owned by a corporation are used for power generation. Third, new fields of activity are explored – mostly in the field of culture (sponsoring, education) – in the context of which a wider circle than just the members of the respective corporation often benefits from the money invested. The 'invention of tradition', which has already been addressed in the Prologue, is also part of this strategy.

Finally, the improved legal position of women since the 1970s (suffrage, matrimonial law), initiated by the state, has also arrived at the commons organisations. Those that are under public law have, since 1991, been forced to grant active and passive franchise to their female members. The matrimonial law of 1985 means that members marrying a non-member no longer lose their utilisation rights. In legal terms, male dominance over the organisation has thus come to an end; in practice, however, even 30 years after setting the course in this direction, only a few positions are occupied by women (Sieber 2005, Stalder and Stuber 2015, Head-König 2019, Stuber and Baumgartner 2019, Schaffner 2007).

2.3 The long-term economy of woodlands and pastures

The considerable landed property of the Corporations of Citizens and other corporations is a common feature which is still of great significance today. Corporations of Citizens own 33 per cent of all Swiss woodlands, 8 per cent are owned by other corporations, and another 23 per cent are owned by municipalities (Brändli et al. 2020: 267). And even 58 per cent of the Swiss summering areas are owned by corporations under public law (Baur et al. 2007: 255). We will now examine Alpine pastures and woodlands from an all-Switzerland long-term perspective. For this purpose we suggest a framework based on the use of energy (Pfister 2014), already used for research into the history of the

commons of the *Bürgergemeinde* Bern (Stuber 2018, Stuber and Baumgartner 2020): the ‘agrarian society’ which was mostly based on local solar energy until the mid-nineteenth century, the ‘industrial society’ based on the import of coal, which had become possible after having been connected to the railroad network (from the mid-nineteenth century to the mid-twentieth century) and the ‘consumption society’ with mass consumption and mass motorisation based on the availability of oil (since the mid-twentieth century).

Contested local resources in the ‘agrarian society’

The sun provided the key energy in the ‘agrarian society’. Food for humans and animals was produced on the basis of photosynthesis, and wood was the main energy resource. Given comparably limited transportation, the local supply situation was crucial, and local resources were thus contested. The long-term maintenance of a dynamic balance of population and crop yields was achieved through cultural strategies (impediments to marriage, emigration) in combination with control over collective resources (Pfister 2014).

Pastures

Many pastures in the territory of today’s Switzerland are the result of human clearing activities, for since the end of the last glacial period, natural grasslands have only existed above the tree line and along rivers, where periodical floods kept areas open. The reduction of woodlands peaked in the course of the *Landesausbau* (land development) in the Middle Ages. Trading relationships were important for this, as was population growth. The share of cattle was increased at the expense of sheep and goats, resulting in a growing need for pasture. This development generated a number of conflicts and made regulation necessary. In areas where feudalism was strong – in particular in the Mittelland – the pastures were part of the *Zelgensystem* (tillable land system), and their extension and cultivation were closely connected to agriculture and fallow lands. In the mountainous regions the pastures were not subject to any fixed rotation system. Here, the regulations determined at least the beginning and end of Alpine grazing, as well as the number of animals to be grazed. Certain kinds of animals were often assigned to individual pastures (Mathieu 1992, Mathieu et al. 2016, Head-König 2013, Stadler 2013).

Pastures existed both as commons and as the property of individual households. Privately owned areas tended to be used for hay, whereas the commons were reserved for grazing; however, there are examples of overlap: commons being mowed in summer, and private areas open to all grazing animals at certain times (*Gemeinweide*) (Leonhard 2009, Dubler 2004).

To increase the productivity of pastures, they were changed into meadows reserved for the production of hay, watered and fertilised with marl and aglime, or else nitrogen-absorbing legumes were grown as food crops. From the eighteenth century on, both the establishing sciences and the peasant population

were involved in such developments. Most of these measures were applied to the particularly fertile areas with Mittelland and Alpine foothills as preferred regions. How far individual pastures in the mountain regions were also subject to intensification is unknown. Alps statistics from the late nineteenth century at least allow for the conclusion that collective pastures were hardly intensified. As a matter of fact, intensification pushes were followed in most cases by changing common lands into private property. Remote and wide Alpine pastures in high regions which were greatly affected by ecological dynamics (rock fall, avalanches, floods) were not preferred areas for such developments (Strüby 1914, Ineichen 1996, Irniger 2006, Stuber et al. 2009).

Woodlands

The multifunctional supply forest of the 'agrarian society' primarily had to satisfy the needs of the local population. On the one hand, it provided firewood, construction timber and timber for the production of tools and fences. On the other hand, it served as a source of food, directly as a supplier of berries, herbs and wild fruits, indirectly as pasture for livestock, as a place for fodder and litter or as a temporary agricultural area. Regionally highly diverse rights of ownership and use can be assumed for Switzerland before 1800, which could overlap in one and the same forest. At the level of forms of ownership, a somewhat simplified distinction can be made between dominion forests, private forests and forests of communities or corporations. The latter formed the most extensive category in terms of area. They were part of the commons, the use of which was usually determined relatively autonomously by the communities and corporations.

The eighteenth century saw the development of scientifically based forestry throughout Europe, which placed sustainable timber management at its centre. Its legitimation was the diagnosed shortage of wood, which from today's point of view can be seen as a tangle of actual supply obligations, emerging growth perspectives and the interests of the authorities. The loose and light forest forms that had emerged from the many different forms of agricultural use were interpreted by the emerging professional forestry as a sign of poor economy. The forests of the Alps and Prealps also played an important role in the supply of energy and raw materials for large commercial enterprises (salt works, iron smelting, brickworks), and for towns in a wider area, provided that the conditions for timber transport on the larger rivers were favourable. The push for deregulation in the wake of the fall of the *ancien régime* after 1800 led to extensive deforestation and timber exports, especially in the mountain regions (Grossmann 1972, Radkau 1986, Stuber 2008, Stuber and Bürgi 2012, Schuler 2013, Irniger 2015, Stuber 2020).

Modernisation pressure in the 'industrial society'

The transformation from 'agrarian society' to 'industrial society', which involved much more than just the development of industrial sites, began in

Great Britain as early as the eighteenth century, before spreading all over Europe with a delay of about 100 years. A cluster of technological innovations (iron smelting by the help of coke, steam engine, mass mining of coal) meant that the limitations on the growth of the 'agrarian society' were eradicated. Based on an efficient network of global traffic, the growing 'industrial society' could for the first time reach back to almost unlimited resources of fossil energy. In Switzerland, this transition took place from the mid-nineteenth century on, having been connected to the European railway network which made coal available as an energy resource that was independent of the area. This transformation process was only partial, however, for biomass was not replaced by coal in many fields. In particular, agriculture and forestry still depended on land, and were thus in a precarious co-existence with the growing industrial sector and under increasing pressure to modernise. The answers to this were, on the one hand, the development of an 'agrarian-industrial knowledge society' and, on the other hand, the beginning of a national agricultural, forest and environmental policy (Moser 2012, Pfister 2014, Auderset and Moser 2018).

Pastures

When the 'industrial society' was establishing in Switzerland, it had much in common with the production of 'agrarian society', and a large share of the population was still working in agriculture. Soon, however, the differences between agrarian and industrial production became a topic of discussion and 'rationalisation' a key concept of agronomics and of establishing agricultural policy. For example, a movement developed for the improvement of alps, propagating a more intensified cultivation of Alpine pastures. Better use should be made of the 'national capital' which seemed to lie dormant in these wide, badly used areas. Behind this there was concern about mountain farming, which, as a result of the transportation revolution, started falling behind agriculture in the Mittelland. It was losing its centuries-old predominance in cattle breeding when, in the lower regions, arable farming was abandoned in many places as a result of cheap grain imports, in favour of pastoral farming and the production of cheese (Auderset and Moser 2018, Strüby 1914).

Whereas the first engine-driven machines appeared in the lowlands at the beginning of the twentieth century, along with new kinds of fertilisers and new methods for processing of grass, the traditional ways of cultivation were still predominant in the mountainous regions. The alps improvement movement denounced collective property as an obstacle, however, because a large share of the mountain farms could benefit from subsidies by way of the collectively owned Alpine pastures, the Federation considered Alpine farming a starting point for its agrarian-political measures and started funding meliorations and the modernisation of infrastructural facilities (roads, stables, huts) in the Alpine regions (Baumann 2011, Viallon et al. 2019, Schweizerisches Landwirtschafts-Departement 1914).

Woodlands

The Swiss Federal Forestry Police Act (1876) subjected the forests of the Alps and the Prealps to a professional and sustainable utilisation regime. The historical context meant that flood prevention appeared to be the main objective of the Forestry Police Act. The repeated major floods between 1834 and 1868, which were interpreted as a consequence of deforestation in the mountain forests, legitimised restrictions to the freedom of forest owners in the Alpine regions – mostly commoner organisations – in order to protect the owners in the lowlands. Economic motives also played a major role. In order to meet the growing needs of the emerging ‘industrial society’, the maximum sustainable yield was sought in timber production.

Depending on perspective, the first federal forestry law was either criticised by historians as a ‘paternalistic attitude of politicians towards the local population’ or evaluated positively because it represented ‘an important starting point for forestry and forestry policy development for many mountain regions’. Recent research relativises the dichotomy between the irresponsible mountain population on the one hand and the emerging state forest policy, which was supported by a professional group of experts, on the other hand. Instead, more attention is given to interdependence processes in which the commoners organisations played an important role in the sustainable regulation of Alpine forests. This was also in the commoners’ own interest, as the financial return from timber production was often their main source of income until the mid-twentieth century (Bloetzer 1978, Bertogliati 2014, Viallon et al. 2019, Stuber 2020).

The polarisation of utilisation in the ‘consumption society’

In the mid-1950s a new kind of growth dynamic was unleashed, transforming the ‘industrial society’ into the ‘consumption society’ and resulting in an unprecedented rise in the material standard of living. This burst of growth was based on the utilisation of new energy sources (oil, gas, nuclear energy) and was accompanied by the development of new technology complexes. The crucial cause was a long-term decrease in the relative price for oil, resulting in gigantic growth in energy consumption, mass consumption and mass mobility. Agriculture and forestry also became subject to the growth logics of industrial production. Tractors replaced horses, machines replaced handwork, and the soil was flooded with large amounts of fertilisers, weed killers and pesticides, resulting in impressive increases in output but also in ecologic problems. A polarisation of use can be observed: the simultaneous overexploitation of favourable areas and abandonment of peripheral areas which could not be cultivated with the help of machinery. The unintended consequences of modernisation are just one element of many ecologic effects which have dominated the social and political discourse since the 1960s. In complementary terms, we may as well speak of the ‘ecologic era’ (Pfister 2014, Radkau 2014).

Pastures

The structural changes to which agriculture became subject in the course of the twentieth century and which resulted in rapid and fundamental change after mid-century led to a massive decline in the number of farms and the workforce, revolutionised the ways of cultivation and markedly changed crops and livestock in a very short span of time.

Today, the plant population on mechanically cultivated pastures is usually based on specifically assorted seed mixtures which are appropriately fertilised and, if necessary, treated with chemicals. This high degree of intensification is accompanied by the loss of large pasture areas in favour of settlements and traffic facilities in the Mittelland, and in many low zones of the mountain region.

It took longer until the degree of motorisation was markedly increased in mountain farming, because the uneven terrain required the development of special machinery. Mechanisation progressed, however, and the polarisation of utilisation is a common phenomenon even in Alpine farming. Many former Alpine pastures are no longer used and have become overgrown, and roads for the transport of animals and the mobility of staff have become an important factor in the future of an alp. As the growing season is shorter in higher regions, investments in the mechanisation of pasture cultivation are a comparably high financial burden for Alpine farms. A double trend can be identified in agrarian policy in recent decades. Competitiveness and mechanisation have been supported, and as a reaction to environmental damage caused by intensified production, ecologic compensatory measures have also been supported. This double strategy is also true for policies concerning Alpine farming. The latter is supposed to meet the standard of 'rationally run farms'. At the same time the 'difficult production conditions' of Alpine farming are recognised, and there are attempts to balance them with appropriate financial measures. There was a marked shift in the setting of political actors when the Federation, under the impression of declining numbers of cattle driven to alps, increased the summering subventions around the turn of the millennium and connected them to regulations for cultivation. This placed local regulations under pressure (Baumann and Moser 1999, Moser 2015, Werthemann and Imboden 1982, Wunderli 2016, Lauber et al. 2013).

Woodlands

The transformation to a 'consumption society', which began in the 1950s, and the accompanying fall in energy prices, once again fundamentally changed the framework conditions for forestry. On the one hand, higher yields of pastures, improved transport connections and alternative sources of income made agricultural forest use obsolete. On the other hand, a gap began to open between stagnating timber revenues and rising labour costs, which made the forestry sector deficient in many ways. In contrast, the ecological value of the forest gained in importance, as did its function as a place for leisure and

recreation. This multifunctional use, which integrates not only timber use but also ecosystem services and recreational values, reveals the historical sequence of three periods of use in the *longue durée*: a 'period of traditional multiple use', a 'period of primary timber production' and a 'period of modern multi-impact management'.

Modern multifunctionality was largely implemented through the Federal Law on Forests (1991). On the one hand, it can be seen as a response to the precarious economic situation of forestry in the 'consumption society'. On the other hand, it contains a whole series of postulates that had shaped public discourse with the ecological turnaround since the 1970s. Perhaps the most interesting innovation is the introduction of subsidies for the provision and maintenance of forest reserves to preserve the diversity of fauna and flora. In the long term, forest owners can completely renounce the use of the forest in favour of the ecological protection of the forest, and be compensated by the federal government and the cantons for the loss of income (Bürgi 1999, Bisang 2001, Stuber and Bürgi 2012, Schuler 2015).

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