Agritourism initiatives in the context of continuous out-migration: comparative perspectives for the Alps and Chinese mountain regions

Yanying Chen 1, Thomas Dax 2 * and Dachang Zhang 3
1 Guizhou University of Engineering Science, China; 1418034346@qq.com
2 Federal Institute of Agricultural Economics, Rural and Mountain Research, Vienna, Austria; thomas.dax@bab.bmnt.gv.at
3 Water and Eco Crisis Foundation, San Jose, CA, USA; pgneg@yahoo.com
* Correspondence: thomas.dax@bab.bmnt.gv.at

Received: date; Accepted: date; Published: date

Abstract: After World War II, the economic recovery of Western Europe implied a swift economic transition for all regions, including the area of the Alps, although affecting various parts at different pace and stages. The resulting out-migration led to population decline in some mountain valleys and regions already since the 1950s. A similar out-migration movement began in China after its rural reform started in the 1970s. The effect was in some cases even more significant than in the Alps, with the first village being deserted in the 1980s. Current estimations report of about 380,000 abandoned rural villages in China between 2000 and 2016, particularly in its mountain regions. While lower population densities might alleviate the pressures on ecology and contribute to environmental benefits, these movements aggravate a spiraling-down process of local economies and culture. In the Alps many regions facing challenges of out-migration and economic changes elaborated agritourism schemes that provided both economic incentives and stability to involved mountain farmers, and continuation of local land management systems. In contrast, in China hardly any comparable trends of rural tourism developed. However, in recent years China’s interest for tourism-oriented farm diversification increased and a range of rural tourism and agricultural tourism initiatives emerged. This paper focuses on the analysis of successful initiatives, problems and development prospects in the Alps and China’s rural areas, redefining agritourism as a systematic integrated activity. Agritourism might therefore be assessed as a core element of the future sustainable development of the Alps and the Chinese countryside.

Keywords: Definition of agritourism; comparative studies; rural development; sustainable tourism; mountain development; Alpine regions, Chinese mountains

1. Introduction

Despite the global increase in tourism [1] and the recent boom in agritourism activities in many countries of the world [2] it seems important to analyze the background conditions and effects of these developments. As the regional context and cultural foundations are different from country to country, and also quite divergent by individual regions, the types and features of agritourism differ substantially. These differences translate also in the search for capturing the phenomena of similar types of “rural tourism” development and the terminology and essence of the specificities of “agritourism” [3].

With respect to analyzing effects of agritourism an understanding of its linkage to both its agricultural production base and its spatial embeddedness is required. “Authentic” agritourism schemes [4,5], like they have been elaborated in the Alps in Europe already since the late 19th century, are based on valuing the distinctness of experiencing leisure time in close relation to nature and to agricultural activities to which particularly urban population groups are more and more distant, or even alien. The demand for this type of tourism is therefore tightly linked to strengthening emotional ties to agricultural activities and to “awe” for natural features which might imply a highly relevant contribution to pathways towards sustainable tourism trajectories [6].
But agritourism activities can only be realized and become effective on a large scale if they are conceived as an economic activity of diversification of farming activities, sustaining the level of household incomes. Increasingly the interlinkages with local and regional (tourism) economy have to be seen as an integrative part of their development. Particularly in remote areas, including mountain regions, islands and other spaces of specific geographical contexts, such tourism activities could imply substantial effects on small-scale regional development and contribute to spatial strategies that nurture nature-based assets [7]. With regard to the development challenges of these regions their contribution to cope with negative economic and demographic trends should not be neglected. As could be shown for some European mountain regions trends of out-migration could be stopped, not least because of numerous regional development initiatives, including agritourism strategies [8]. Changes affecting migration trends are also due to shifts in attractiveness of those areas. This paper focuses on these challenges and comments on selected agritourism initiatives that aim at coping with such negative trends. By comparing approaches in various regions of China with developments in mountains of Europe where such activities look back on a long-term experience, useful lessons for future adaptation could be derived.

The migration of rural labor to cities in China began at the end of 1978 during the period of reform and opening-up. China’s rapid rural urbanization process has increased the migration of a large number of rural labor to cities. According to official data, China’s urbanization rate exceeded 50 percent for the first time in 2011. In the period before, China’s urban population had increased from 480 million (in 2001) to 813 million (in 2017), and the ratio of rural permanent population to urban permanent population has dropped significantly. It was forecasted that China will have another 150 million farmers moving from rural to urban areas by 2020 [9]. The forces driving rural decline are particularly strong in China where this process has been on-going since decades and a “rural revival is needed to counter urbanization” [9, 275] visible throughout all major regions of the globe.

As the result of farmers outflowing, villages are rapidly disappearing. The first village was abandoned in the 1980s. According to the statistical report data released by the Chinese Bureau of Statistics, about 380,000 natural villages disappeared in China between 2000 (3.7 million) and 2016 (3.32 million), which means “65 villages disappear per day”, especially in mountainous areas [10,11].

Following to the disappearance of villages, so does the village culture. Out of numerous examples the case of a mountain village, Nankeng of Yongxiu County in northwestern Jiangxi Province should be highlighted here. It developed a village-wide martial culture to defend against foreign enemies during the past century. However, at present, with the outflow of the peasants, everything, also those culturally specific elements have gone.

Also many mountain regions in Europe used to be characterized by weak economic performance and suffered from negative population trends. Even if that assessment has to be differentiated, as in more accessible and/or prosperous regions mountain areas were characterized also by more positive demographic changes. A place-specific analysis is therefore required that is looking beyond the final balance of population balance, but addresses its various components and territorial differences. Selecting mountain areas of population decline in Austria provides an interesting case where approximately one-third of rural areas have experienced substantial negative population change over the past decades [12]. Shrinking rural regions have consequently been highlighted as an emerging topic in European discussion of regional development [13]. The analysis of the Austrian situation of mountain regions stressed the persistence of the phenomenon in an inner-Alpine context (which has inspired the term of “Inner Peripheries”) and highlighted that many initiatives are relevant in these regions that aim at impacting on the economic performance, income levels and well-being patterns of the local population. From the project analysis it is concluded that future approaches have to go beyond ‘traditional’ strategies of targeting economic growth, but need to focus on local participation, social innovation in line with technological development and particularly establishing trust as basis to effectively address well-being in the region. The recent analysis did only marginally refer to tourism development, and the scope for agritouristic initiatives as these were main preoccupations about two decades ago. It should be highlighted that a wide net of agritourism structures is available
throughout these regions which have a particular influence on service provision, attractiveness of the region and linking land management and farm production to tourism options at local and regional level. But with the on-going population decline and problems of finding successors to agritouristic facilities there is a renewed interest in strategy consideration for these tourism regions. Problems of diverse tourism intensity add to this concern and call for a holistic approach to regional policy development [14]. A synthesis of the long-lasting efforts to enhance agritourism in Austria was presented and discussed in a recent workshop [15] revealed numerous challenges and opportunities of this tourism form. It could provide findings from respective consumer services that this is an adapted type of tourism offer that largely meets the emerging demand for high-quality and, at the same time authentic, locally based tourism offer linked closely to farming activities, vernacular elements, food, outdoor sports and nature. On the occasion of its 25th anniversary the national association of agritourism in Austria boosts of hosting every year about 2 million guests, thereof 500,000 children, which is assumed as highly important to convey knowledge and experience of the farming world to (mostly) urban visitors [16]. Linking demographic and urbanization trends with agritourism interest is thus a chance for mitigating population decline and shifting the values of urban and rural inhabitants towards a more balanced assessment which includes significant opportunities for high-quality agritourism developments. The pertinence of the issue is underlined by a recent resolution of the European Parliament [17] which refers to the importance of rural depopulation in these regions (point E) and “(e)mphasises the need to support the further development of rural tourism and mountain agritourism while preserving the specificities of these areas, for example traditions and traditional local products, since tourism has a major social, economic and cultural impact” [17, point 8].

2. Materials and Methods

The comparative analysis of this article is based on the intensive discussions of similarities and divergences between the spatial contexts of mountain development in China and Europe. Drawing on the experience of the long-term and most intensive application of the type of agritouristic development in the Alps, an extensive filed visit and investigation of various forms of application and with the various levels of institutional support structures in all countries of the Alpine Convention is the basis of this scientific exchange [14] [18]. With regard to the aim of this article, to investigate agricultural initiatives contribution to mitigate out-migration tendencies from mountain regions, a series of case studies have been carried out in China and a literature review on the analysis for the European situation was applied. Both include a view on mountain areas and lowland areas as contextual regional influences might be decisive and have to be taken into account for comparative purposes.

The main interest in observing and analyzing appropriate place-based initiatives at the local scale [19] is targeted at exploring not just challenges, but particularly the drivers for realizing specific opportunities available in those regions. This should enhance strategy building for making use of potential for rural development in these regions by addressing local specificities and spatial inter-relations [20]. There are specific benefits of agritourism initiatives which have close relationships with regional development options and performance [21]. In addition to literature in Europe, and other parts of the world, the scope for increasing potential and demand for rural tourism, and its sub-types of arm linked activities of agritourism, in China [22] should be highlighted.

The exchange of the approaches is used to build on inspiration by accessing experience of agritourism, particularly in the Alps (e.g. [14], [23], [24], [7]). The analysis reflects on the particular scope of activities and the integration into the regional socio-ecological system (see [25; 26]). The specific interest is to address issues of migration and indirect effects of agritourism on regional differentiation and local attractiveness. As a consequence, these initiatives build on and, at the same time, have implications for quality of life experiences in those mountain areas ([12]. A reflection of those inter-linkages in the analysis of this article reviews the wide array of contributions in the field on arguing for a revised perspective on “shrinking rural regions”, in particular including mountain regions in all parts of the world.
3. Results

In many parts of the world, mountain regions have been included into human settlements quite early in historical perspective. This is linked to place-specific features of settlement development, but reflecting the evolving human-nature relationship. With demographic changes and technological development of agricultural production, movements and extension of settlement area towards mountain spaces that were previously not included in settlement became widespread. As mentioned, the time and pace of these changes are strongly related to spatial demographic, economic and political contexts which have tremendously changed in history. The settlement of large parts of the Alps can be observed throughout various periods of the Middle Ages. In general, this contributed to the shift of cultural spheres and exchange as well as areas of retreat (over longer periods). In many cases, and particularly in the Alps settlement and evolving land management were shaped by dependence on power relations and property rights, often depicting ‘feudal’ systems that assigned decision on land and its management to a small group of powerful people (c.f. for the Austrian Alps, [27]). Up to the present time, these historic foundations characterize settlement structures and land management patterns, even if socio-economic conditions have altered completely. To some degree, cultural elements related to the past land management practices dispose of significant elements of attraction for agritouristic use.

In current China, villages include natural villages and administrative villages. Natural village, a natural settlement formed by villagers who live together for a long time, is the most basic component of rural settlements. The administrative village is the lowest level in China’s administrative regionalization system, which is usually composed of a large natural village or several natural villages, and has a villagers’ self-governing body such as a villagers’ committee or a village office. To a much higher extent than in the Austrian Alps mountain villages are located in deeply remote areas in high mountains where accessibility is very much restricted. Settlement in those regions was driven by villagers who fled to the mountains to escape from conflicts and fightings in other regions and strict government administration. In effect, this led partly to a higher population share and more villages in Chinese mountains which is expressed by considerably high population density levels for mountain contexts (e.g. about 270 inhabitants per km² in mountains of Bijie in Guizhou province, see [14]). But also in these remote areas many cultural expressions are visible and nowadays could provide elements of attraction for agritouristic use.

3.2. Factors of rural labor outflow in mountainous areas

As argued above, out-migration from mountainous regions is widespread, albeit in Europe, as well as in China, quite different developments are experienced [8]. In the following an account of the aspects impeding out-migration and aspects driving local people to leave mountains is presented.

First, a number of factors impeding outflow comprises the following ones:

Rural tradition: native culture and customs (parents do not travel far, clan culture), hard-working, relatively closed vision, high satisfaction with the status quo of living conditions and local options.

Rural people used to be unwilling to go out: during the early years of China’s industrial development in the 1950s, there were problems with factory recruitment.

Administrative reasons hindering migration: China’s household registration policy has the effect of inhibiting movements: for the efficient management of the people, for a long time, the household registration has been used to restrict the migration from other places, especially from rural areas to cities, or small cities to relatively large cities (‘huokou’ system; [28]). Farmers are confined to retain their living place in the countryside. Education upgrading was eventually the common way, if not to say the only way, for young people to leave the countryside.

On the other hand, a series of important factors add to the motivation to find living places in other regions and strongly drives outflow from mountain regions:

- Excess labor: in many mountain regions, employment opportunities are scarce and structural change of agricultural labor increases the job surplus; in particular see for example the situation in the Wenzhounese area, Zhejiang Province.
• Low income levels and disparity to urban income chances: employment remuneration in cities is much higher and provokes search for urban work places and increases commuting patterns. Relatively spacious and quality houses in villages can only be realized based on working incomes from employment in cities, for most rural regions.

• The pursuit of urban spiritual life, material life and medical & social insurances: Given the attractiveness of cultural traits of urban life, and health and social security issues guaranteed to a higher extent in urban contexts, many young people are reluctant to return to their home places.

• Higher benefits of agricultural industry in non-mountain areas: Differentiation within agricultural structures and productivity aggravate challenges of mountain areas, including the impact of logistics and modern life on rural areas

Cultural experience and example of out-migration of deprived farming population: In history, in many mountain regions peasants migrated either to neighboring countries (such as Swiss farmers migrating to neighboring mountain areas in Vorarlberg in Austria [29] or to non-mountain or even far away regions, like to the Americas, particularly driven by severe poverty and desire to start a “new living” under quite different conditions.

3.3. Contributions and challenges of rural labor outflow to societal development

Out-migration from mountain regions is not just a spatial phenomenon and has impacts on demographic development, but inherently addresses the whole range of issues of society. This is a major reason that local changes of land management and employment developments have to be linked to cultural features. Tourism, and particularly agritourism, has a pivotal role in linking spatial changes, landscape development issues and cultural changes, which includes opportunities to influence and shape these processes. At first, some considerations on important (positive) contributions of labor movements are referred here, as for example:

• Make up for the lack of manpower in the social service industry,

• Make up for the lack of manpower in industrial development,

• Reduce the pressure on the fragile ecological environment of mountainous areas.

At the same time out-migration has severe problems for the society in mountain regions which have to be taken into account when elaborating strategies for agritourist initiatives:

• A detrimental effect on the existing municipalities and the spatial structures of these mountain municipalities: relevant sectors comprise in particular education, housing, municipal security.

• The disappearance of ‘rural homeland’ culture: China is a large agricultural country that has lasted for thousands of years. The disappearance of rural culture is an impairment and does not provide an adequate answer to the place-specific natural and cultural heritage.

• Taking away options of next generations: The problems of rural left-behind children (LBC) are mainly the matter of their psychological and personality distortion. Although a governmental report indicates that their number is decreasing, due to the open policies which allow the rural children to go to the city with their parents, this issue should not be neglected [30].

• Affecting social service provision: In particular decreasing population impacts on the potential to secure public services, in particular (quality) education in rural mountainous regions.

• Impact on social security and self-esteem: Awareness of severely restricted future options, inequality in society and a new generation of psychologically and temperamentally distorted rural people.

Accelerate changes in land management, leading to negative environmental performance: Even already in earlier stages of the process, a change in land management and a decrease the utilization rate of land and its resources might cause outflow, altered perceptions on regional opportunities and assets, and lead to environmental consequences with negative impacts. In the context of climate change these processes tend to gain in relevance and change processes might gain in speed. Moreover, changes of the natural resource use and its aesthetical appearance, expressed through landscape changes would directly impact on tourism attractiveness and capability to apply agritourist strategies in such mountain areas.
3.4. Future trends of rural labor outflows in mountainous areas

In analyzing future trends of migration from and to mountain areas a place-based approach is required as conditions and spatial trends are very diverse. Following analysis in the Alps the detailed observation at fine geographical scales suggest great variation in territorial response. Moreover, since more than two decades mountain regions in large parts of Western Europe share the change in migration movements, i.e. an increase in immigration from abroad due to international movements and flows towards (Western) European countries. As a consequence, most mountain regions show a positive migration balance of international movements, but in many cases a national negative one [31]. Aspects functioning as catalysts are:

- Most people believe that with the rapid development of industrialization, urbanization and agricultural modernization, some traditional villages have gradually disappeared, which is regarded as the inevitable historical development.
- Urbanization trends: Following the mainstream trend, the urban population is steadily increasing and has exceeded the rural population at the global scale, but also in China, and in many mountain regions trends of urbanization can be observed in a similar way. However, with regard to these overarching trends we could postulate a number of countercurrent factors which might provide aspects for future strategy development of mountain regions that cope with the imminent challenges and simultaneously consider the opportunities and needs of local population and societal demands. Main aspects involved are:
  - Social dependence on agriculture: No matter how the society develops, agriculture is a precondition for life (a ‘must’) that shapes landscapes, impacts on settlement structures and generates food provision and security. For China as a country with a large population it is essential to secure land management and food security by sustaining development options for adapted farming systems. This relation is relevant throughout our regions, affecting mountain regions as well, and must not be neglected in future development strategies. Therefore, the countryside will inevitably exist and resilience in resource use is a crucial aspect.
  - The need to maintain rural culture: The foundation of Chinese traditional culture is in the countryside. Traditional villages retain rich and colorful cultural heritage. They are the important carriers for carrying and embodying the traditional civilization of the Chinese nation, aspects that have been shaped over long periods in historic times.
  - China current policies: Rural household registrations are permitted to build their own houses. Many city residents now try to own or retain rural household registration (then, they can build their own houses while otherwise they would only be able to buy condos from real estate developers), owing to the traditional Chinese desire to own a house of their own and appreciating the attractive value of living conditions in the countryside.
  - Future of labor market development: The demand for low-skilled labor will be reduced in the future and issues of high-level education gain in importance. Matching education and employment skills will become a rising challenge, and territorial specificity and attractiveness will add to these.
  - Returning process to hometowns: Many farmers working in cities have broadened their horizons and ideas, accumulated the start-up fund, and returned to their hometowns: They engaged in using the unique environment and conditions of the countryside to start new businesses. An increasing number of good practice examples exist throughout the world, with strong emphasis on Alpine areas achievements (see [32] but also emerging examples throughout China’s mountain areas (Mr. Wang Chuanxi, the village head of Daicun Village, Lanling County, Shandong Province, see Box 3; and Mr. Wei Jia, an undergraduate going back to his home, Huangdu Village, Xilong Township, Anji County, Zhejiang Province, see Box 1).

3.5. Findings and their relevance for future-oriented development

It is a key constraint how to realize the transformation and development of China’s mountainous rural areas to the development of the whole country. The Alps have transformed from traditional villages and agriculture long time ago, and now are characterized by a mosaic pattern of economic...
activities and living spheres. Yet, challenges remain high and on-going studies reveal the scope of divergent options and considerable choices available to local and regional actors. The current prospective study on the future of the Alps in 2050 provides ample indications for decision points and transformation of social and economic and social pathways [33]. With regard to mountain regions experiencing or threatened by long-term out-migration further analyses of changing strategies, for design and implementation of transformation at various levels (including fine geographical ones) are required.

The inclusion of the development of the tertiary sector, i.e. a focus on service sector employment might be of specific benefit for mountain regions. It holds a strong opportunity for land management and the linking of activities of agricultural actors and other local sectors. Agritouristic activities, like those established since long in the Alps, dispose of a significant potential also for mountain regions of China. The following Case Studies (see Boxes 1-3) serve as illustrations for exemplary approaches of numerous and very diverse initiatives across these mountain contexts. All of them underpin place-based opportunities that were not visible at first sight, but which had been addressed and nurtured through the initiative of innovative people and/or strategies and programmes.

4. Discussion

From the analysis of movements of mountain population and the basic contribution of mountain farming to the functions of mountain regional development it seems important to address the specific assets of mountains of an inherent value potential. The case study presented on the Huangdu village (Box 1) exemplifies the need for incorporating tourism development in a comprehensive regional approach. In particular, many of those assets and activities are closely linked to land management, food and valuation of landscapes, thus underpinning the scope for agritourist action. Developing a rural (mountain) tourism strategy that takes advantage of these features relates also to the general development of the tertiary industry which has a direct impact on jobs creation and regional economic performance. In this regard there is a long and intensive experience of the Alpine mountain tourism, and particularly agritourism business that could be used for drawing lessons for other mountain regions around the world and key aspects might serve as “transfer knowledge” for mountain development in China. With the huge population of China’s mountain areas, there is big scope for appropriate agritourist activities. Due to the limited development of tourist destinations so far, those rather few tourist spots tend to be overcrowded. In this situation of rising demand and limited current offer mountain agritourism businesses have great potential for development.

This approach requires a joint perspective and action plan for developing agriculture (place-adapted land management of agricultural and forest areas) and tourism bosiness planning. This might be inspired by experience of the way how the resort industry in the Alps, and more specifically activities linking agriculture and tourism activities through agritouristic concepts, faced the place-specific challenges and addressed opportunities of mountain development.

Building on this repertoire of empirical knowledge, agriculture and tourism need to be integrated into a new agritourism system industry. It refers to a redefinition of agricultural tourism which focuses as a core element on the future sustainable development of the Chinese countryside (following the history and insights from activities in the Alps). Core activities would include:

- Understanding and fostering the variety of multi-faceted approaches to suit the interests and needs of various groups of local people.
- Redefining agritourism as a systematic engineering: agriculture is designed for tourism and supporting tourism as well as its original basic functions (see Box 2).
- Enabling the complementary functions of agriculture and tourism to support and promote each other in order to achieve the required contribution to ‘sustainable’ development (see example of the case of Beili Dujuan in Guizhou Province [34].
- Enhancing the transformation of the economic efficiency of rural smallholders to agricultural companies, by addressing place-based options of product development, niche product development, regional and high-quality labelling focus, and diversification activities that link.
natural resource use with increasing social demand for those kinds of (highly valued) products and services.

- Establishing a comprehensive linkage chain of sectoral activity, local anchoring, and diversification of family farms is based on social capital development (see case study in Box 2).
- Linking farm tourism activities with local tourism attractions (see case study in Box 3) to broaden the scope of attractive elements and increase demand for these agritourist offers.

5. Conclusions

The paper explores the potential of enhanced agritourism activities in the context of regions with affected by population decline trends since many years. While this situation has been a prominent issue in the Alps, and countries like Austria put a strong emphasis on diversifying activities of land management towards other activities, the outflow of mountain population, and particularly young people is a more recent phenomenon in China. Consideration and analysis of the history of land management, challenges and opportunities and scope for tourism and agritourism concepts to cope with rising regional problems are addressed for both spatial contexts and, to some extent, comparison indicates lessons for future strategy building and action development. The exploration of Chinese development of agritourism cases emphasizes two further aspects: A strategic concept for agritourist development needs to consider its role in tourism at the time when planning agricultural development. This is an additional perspective that goes beyond the European model that is primarily based on historical structures and conveys less scope to planning devices (so far). The second issue is partly discussed in Europe as well, i.e. the issue of cooperation: In China the focus is on community development in the form of cooperation of a whole village which is regarded as essential to establish agritourist activities, as highly efficient and sustainable rural tourism is not shaped just by individual events, but more importantly requires a whole setting of the environment and the place-specific atmosphere.

The case of Austria (like similar regions of the Alps, e.g. Italian Alpine regions) engaged since long in wide-spread agritourist activities, enhancing a small-scale tourism operation. This model builds on the specific agricultural and business structure of these regions and favours family enterprises and linked agricultural and tourism operations. The application of this approach throughout the country has led to a situation where about one tenth of the overall tourism activity is linked to agritourism, in a very intensively used mountain country. The main success factors are linked both to structural features and the asset base which is characterized by mountain amenities highly appreciated within the national society and at international level as well [35]. Although mountain agritourism is just a minor economic sector in the overall regional economy it is remarkable that this activity builds on and nurtures attractiveness of the area, thus indirectly contributing to mitigate out-migration, respectively increase pull-factors for immigrants. A thorough survey of the effects of the agritourism business across Austria’s mountain areas is not at hand, but action plans and rising awareness of these linkages underpin the relationships addressed.

These issues are of a substantially higher impact and extent for the mountain regions in China which are affected by a particularly strong urbanization process, structural changes and commitment to new approaches and developing models, including agritourism activities. The high diversity of regional situations in China prevent a standard application and summary evaluation of present implementation of such approaches. Nevertheless, the case studies presented point to three major issues for conceptual development of agritourism in this country: (i) addressing the amenity value and landscape features as an attractive element to conceive fruitful agritourism activities; (ii) engaging in a comprehensive planning process that links the various actors and business levels in the cross-sector activities; and (iii) integrate specific local tourism attraction elements, as drivers for attracting and supporting more local organized small-scale agritourism business activities. Rural tourism is currently a “hot trend” in China [36] with about a third of tourists heading to rural regions which means an estimated 2 bio rural visits by 2020. This provides a substantial scope for agritourism development.
Experience from both mountain contexts underpins the need to appreciate natural and cultural heritage as basis of agritourism and the need for a carefully conceived business development. It highlights that it is not so much depended on “optimal” planning devices, but on the long-term commitment of local actors, a deep cultural connotation of the selected strategies [37], national appreciation and support and stable structures for enhancing social capital formation in these mountain areas.

Author Contributions: Conceptualization, T.D. and D.Z.; Investigation, Y. C.; Methodology, D. Z.; Project administration, T. D. and D. Z.; Validation, D. Z.; Writing – original draft, T. D. and D.Z.; Writing – review & editing, Y. C. and T. D.

Acknowledgments: Authors gratefully acknowledge support given by Marco Onida, then general secretary of the Alpine Convention during the field visit to the countries of the Alpine mountain range and for information on the wide range of agritourist initiatives in that area. Moreover, the present article could integrate valuable comments provided by participants at the presentation of a former version of the article at the First World Congress on Agritourism in Bozen/Bolzano, Italy, 7-9 November 2018.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Box A1: Case study Huangdu village

Rural model of mountainous area

Development experience of Huangdu Village, Xilong Township, Anji County, Zhejiang Province ([38-40]

Huangdu village, 11.5 km², 6 natural villages, 423 farmers with a population of 1,516 is one of the poorest villages in Anji County. In order to get rich, village officials led the villagers to run bamboo production enterprises, wire drawing factories, iron casting factories, etc., to plant red bamboo, pepper, chestnut, bayberry, chrysanthemum. However, there has never been a desire to “get rich.” Since the large-scale planting of white tea in 1997, the per capita annual income of the villagers had increased from 400 yuan (about 47 US$) in 1997 to more than 10,000 yuan (about 1176 US$), for the first time in 2003. Today, running the tea garden of more than 3,200 ha, the villagers take the white tea industry as the leading factor and combine it with rural tourism development. With its unique scenery of thousands of acres of tea gardens, and various tourism programs, such as farm experience, colorful outdoor leisure activities and “tent” hotels, the Village has become an excellent destination for leisure travel and holiday. The Village’s output value exceeds 400 million Chinese Yuan (about 61.5 million US$), per capita annual income is more than 36,000 yuan (5,538 US$) in 2018, all villagers live in their new houses, and have their cars.

Today, Huangdu not only sells white tea, but also sells the tea landscape and tea culture, striving forward by making use of the integration of the three products. Their cultivars cover nearly 200,000 ha in 18 provinces.

Box A2: Case study Lujia village
Rural model of mountainous area

Development experience of Lujia Village, Xilong Township, Anji County, Zhejiang Province ([40-42].

Lujia Village, situated half an hour South of Huangdu Village, 16.7 km2, population 2,200, is also one of the poorest villages in Anji County: The collective economic income was less than 18,000 yuan (2,117US$), but the average debt was 1.5 million yuan (17,647 US$) in 2011. However, at the end of 2017, the per capita annual income of this village exceeded 35,000 yuan (5,385 US$), and the total assets of the village collectively exceeded 140 million yuan (21.5 million US$).

In 2013, Lujia Village spent 3 million yuan to hire a team of experts to engage in a comprehensive planning for the village. With the model of “company + village + family farm“, the village fully introduced the concept of social capital to develop its beautiful area relying on rural tourism activities: rural areas were transformed to scenic spots, resources were changed to capitals, and villagers became shareholders. The village uses the collective assets of the whole village as the stock to buy shares, and the corresponding project company is jointly registered with the external capital. The villagers gradually diversify their income channels by renting land, starting a business farm, participating in other operation services of the scenic spot, etc. At the same time, the villagers will receive dividend income from the equity each year.

Regarding family farms as a pillar industry, Lujia Village established 18 family farms (bamboo farms, Chinese medicine farms, orchard farms, vegetable farms, tea farms, flower farms, alpine pastures...) according to local conditions, and initially created a scenic spot, so called “opening the door is the garden“. A small sightseeing train connects the 18 family farms, and drives the development of leisure tourism. On average, there are more than 10 tour groups with 600 visitors every day.

In 2017, the Village further proposed the concept of regional management—the “Landscape Lujia“ complex, with Lujia Village as the center, and radiating around it to include the three neighbouring villages Nanbeizhuang, Yishita and Chizhi, covering 55.9 km2 in total. This project has been included in the country’s first package of national rural complex pilot projects.

The positive changes in Lujia Village have promoted the return of young working people and university graduates who had left the village. They came home to run Bed and Breakfast homes, do e-commerce sales of agricultural products, or participate in business management of the project companies.
Box 3: Case study Daicun village

Lowland development model

Development experience of Daicun Village in Lanling County, Shandong Province ([43]):

At the beginning of 1999, Daicun was poor, and the collective debt of the village was over 0.48 million US$ (the income of a professor was about 300 US$ in China at that time). However, a new Mission was approved: “Born in the countryside, Grow in the countryside, Take root in the countryside”. The new village leader, Mr. Wang, began to explore the way of large-scale modern agriculture. Under the guidance of experts, all land was centralized and joint-stock large-scale operation was carried out. Experts were invited to design and build a first-class modern agriculture demonstration park in China, which became a rural complex integrating agricultural science and technology demonstration, seed and seedling cultivation, industrial incubation and leisure agriculture.

In 2012, the first pilot project the "National Agricultural Park" was established with the approval of the Ministry of Agriculture and the National Tourism Administration. The project covers a total area of 1,300 ha, with an investment of 150 million US$, and now receives more than 1 million tourists annually. At the same time, over 200 training courses for over 100,000 farmers have been held here.

There are agricultural companies, tourism companies and shopping malls in the village. Every villager and every family will find their own suitable job and development opportunities. Villagers can also develop and start businesses according to their own characteristics, skills and wishes.

This thousand-year old village thrives due to the development of multiple industries. The old debts could be paid off within a few years, and the village wealth has been growing day by day. In 2017, the total output value of all industries in the village was more than 310 million US$, and the village collective operation profit was 17 million US$. The per capita net income of villagers increased from about 170 US$ in 1999 to 9,500 US$ in 2017.

The development of Daicun has brought more and more benefits to the villagers and gradually solved the problems of employment, education, medical treatment, endowment and housing. Villagers moved into their houses from dilapidated mud houses, and all people over 60 years old live in well-equipped "senior apartment", and enjoy "senior pension". All villagers have been paid by the village to participate in the programs, “New Rural Cooperative Medical Scheme” and “New Rural Social Security Scheme”. The village also provides financial aid and scholarships for all children from primary school to university level. At the same time, the traditional culture of the village is also carried forward,

"The village has changed, the farmers have become richer, the life has been better than ever before, and the attraction has become more and more.” At present, though there are only about 3,600 villagers in Daicun, there are more than 4,000 workers commuting to the village from other places. More than 200 university graduates either come back home to the village to run their own businesses or are recruited by the village.
References


9. Liu, Y.; Li, Y. Revitalize the world’s countryside. *Nature* 2017, 548, 275-277. DOI: 10.1038/s41586-017-01414-5. Author 1, A.B.; Author 2, C.D. Title of the article. *Abbreviated Journal Name Year, Volume, page range.*


