

# The Research on the Mechanism for the Further Integration of Rural Tourism and Local Culture

Ying Guo<sup>(⊠)</sup>

Management School, Jiu Jiang University, Jiu Jiang 332005, Jiangxi, China 3100848161@qq.com

**Abstract.** In order to improve the quality of rural tourism and spread positive rural cultures, addressed by questionnaire surveys and analytic hierarchy process (APH) method, the research puts forward the integration of rural tourism and rural culture, based on the different forms of rural tourism scenarios, and divide the rural tourism attractions into the convenience, the outlooks, the culture of the resources and the management as the criteria layers. The solutions to the obstacles which have been limiting the integration process of rural tourism and local culture are to identify different tourist needs exactly and build an internal driving mechanism to the companies, create government innovation system to guarantee the integration development process, and construct the external coordination environments to ensure the integration of tourism industry and local culture in terms of the optimizing the 13 judgement layers based on the APH results analysis.

**Keywords:** Mechanism for the Further Integration  $\cdot$  Rural Tourism  $\cdot$  Local Culture

#### 1 Introduction

In 2009, the Ministry of Culture, and the National Tourism Administration of China put forward that culture is the soul of tourism and tourism is the carrier of culture. In 2015, the No.1 Central Document proposed China would actively develop various functions of the agriculture, explore the value of rural ecological leisure, tourism, culture and education. Rural tourism industry assumes the missions to eradicate poverty of the remote countryside and communicate local cultures' functions. With the integration of the responsibilities of the ministry of culture and the national tourism administration in 2018, the integrated development of culture and tourism embarked on a new journey. After the pandemic, the rural tourism plays a dominant role to connect the primary, the secondary and tertiary industries in booming the rural economy.

#### 2 The Related Academic History of Domestic and Foreign Research on Rural Tourism

Rural cultures have been formed in China's rural society gradually for thousands
of years in the history, reflecting the rural social life outlook of craft skills, custom regulations, as well as the origin of the Chinese nation traditional culture.

- [1] Xiaotong Fei (1947) discussed China rural society from three dimensions: the interpersonal bond, object-self relationship and sacred experience. [2] Rural tourism means tourists mainly leisure behaviors take place in rural areas, "country" characteristics work as the core element to attract tourists. Some kinds of rural natural and human landscapes have been developed within a reasonable range with the agricultural production, farmer life, and other various elements blended in to meet the residents' demands of leisure vacation. [3].
- (2) Use of rural characteristic resources advantages, developing cultural tourism industry. Village (rurality) is the lifeblood of rural tourism really, how to keep the native character of traditional folk culture and local peasant way of life are the key factors to sustain the rural tourism orderly. [4] Find the "rural culture" commodity buyer (consumer), use the rural characteristics to develop the cultural tourism resources integration industry. [5].
- Research on the partnership between rural tourism industry and relevant stakeholders.
  - Rural tourism is not highly profitable and has a weak ability to respond to the markets changes, requiring collaborative planning by stakeholders. [6] The centrality, stability and the common values of a rural community group can create social and economic benefits for stakeholders, which is conducive to the sustainable development of rural tourism industry. [7][8].
- (4) Research on the relationship between rural tourism industry development and rural revitalization. China's rural tourism investment model presents a trend of complicated relationship, diversified subjects and diversified cooperation. As the evolution of rural tourism investment going on, a more complex tourism economic relationship has been formed between farmers and rural tourism enterprises, which has become an unfavorable factor that inhibits the efficiency improvement of the investment subjects.

In order to meet the new development requirements, rural tourism operators need to cooperate with tourism companies and villages, analyzing how to integrate rural tourism products and the rural culture. The local government need to be involved in exploring the evaluation mechanism of the integration of tourism and local culture, and promotes the sustainable development of rural tourism.

## 3 The Current Status of the Integration of Rural Tourism and Local Culture Analysis

### 3.1 The Current Status of the Integration of Rural Tourism and Local Culture in China

The National Tourism Administration determined that the tourism theme as Huaxia City and Countryside Tour in 1998. Agricultural tourism was as the focus of tourism work in 2001. The Central Government in 2015 proposed to actively develop various functions of agriculture and to explore the value of rural ecological leisure, tourism, culture and education. Subsequently, some provinces formulated the rating standards of

rural tourist attractions according to the rating rules of A-class tourist attractions issued by the National Culture and Tourism Administration. Now some kinds of rural tourist attractions equipped with local culture are available.

There are 7kinds of rural attractions according to the main tourist functions:

- (1) Landscape sightseeing tourism. It relies on natural endowments and characteristics to develop showing and gala programs and so on. Such as: sightseeing farm, pasture, fishing village, bird garden, park, rural science park.
- (2) Culture heritage tourism, including historical and cultural sites, cultural heritage sites, restoration and reconstruction memorial sites. Such as: the experience of traditional opera, local dance, traditional sports, acrobatics, local arts, traditional skills, Chinese medicine.
- (3) Local culture and creative tourism, which take place at traditional villages, ancient towns, local museums. Such as: country club products, farmhouse accommodation, campsites, leisure farm.
- (4) Folk custom tourism, which is displayed on festivals and celebrations events. Such as: catering/accommodation/picking garden, agriculture, fisheries interaction,/rafting tour, self-driving tour/intangible heritage corridor, village museum, traditional festival activities.
- (5) Local museum + leisure/education/boarding farm tourism. Such as: Education farm, boarding farm, red education base places, cultural creative park, theme parks.
- (6) Local culture experience tourism. Such as: art gallery, pastoral comprehension building, ancient village/town.
- (7) Rural scenic spots for health and recreation tourism. Such as: hot spring tour, hiking, horseback riding, rafting tour, self-driving tour. That rural tourism operation in China shows the characteristics of low density integration with local culture. And it has been transformed from a simple sightseeing function to multiple experience tour. The main places of rural tourism are ancient villages, ancient towns, rural scenery sightseeing spots, rural experience museums.

### 3.2 The Characteristics of the Integration of Rural Tourism and Rural Culture in China

### (1) the Operating Subjects Integration of Rural Tourism Industry and Local Culture

Tourism operating subjects include investors of tourism enterprises, operators of tourism industry, government, and some local people. There are 74 Rural Tourism Demonstration Area Companies in Jiangxi province in 2022, half of the managers are from the province, about more than 80% of the attendants are from the local counties, the higher level of the positions working in the companies, the less of the local persons because of the salaries paying. Tourism operating subjects should study local culture deeply, fully understand folk customs, regional culture, belief, historical evolution, etc., and foster

Y. Guo

the core culture competitiveness of tourism industry according to the needs of tourism development.

#### (2) Integration of Tourism Field and Local Culture

The planning and design of tourism sites absorb rural cultural elements and meet local aesthetic needs: the design of tourism products and tourism service procedures should reflect local characteristics and give tourism products an explanation of local culture to enhance the penetration and communication power of local culture and highlight the charm of local culture.

Some of the provincial rural tourism attractions failed to the reviewing audit, mainly because of no prominent features of the local culture. Such as Fuzhou City, Jiangxi province in 2020, 11 provincial AAA rural tourism attractions had been ruled out of the groups, 28 were still approved at that year, 10 of them had no obvious culture characteristics, 1 containing culture factors, without connotation constructions; 4 provincial AAA rural tourism attractions had been ruled out in Jiujiang City, Jiangxi province in 2020, all of them had no obvious culture characteristics. According to the evaluation results, it can be concluded that rural tourism has been integrated with the local culture.

#### (3) Integration of Tourism Industry and Some Rural Culture Sections

The revitalization of rural is in some degree dependent on the local cultural tourism industry, through the performance of arts, audio and video products, books and magazines, sports, health and other forms of theme entertainments, studies tourism, museum tourism, festival activities, and so on, which also belong to culture industries, it can enrich the connotation of tourists experience, spreading tourist destinations cultures, building the brand characteristic of possession.

Rural tourism companies make fully use of tourism resources and prior to tourism as the dominant industry, promotes manufacturing, public service and social governance, and can highlight the development concept of "Innovation, Coordination, Green, Open and Sharing". Developing rural tourism attractions promote the overall improvement of rural economic and social governance.

#### 4 Analyzing Rural Attractions from the Integration of Rural Tourism and Rural Culture

#### 4.1 Assume Four Dimensions to Measure Rural Tourist Attractions

Rural tourism industry prosperous depends on the rural tourism attractions capabilities and how to integrate the resources. Suppose there are four dimensions to measure rural tourist attractions in the paper: convenience of rural tourism scenic area, the outlooks of a rural tourism scenic area, the culture of rural tourism resources, rural tourism scenic area management. In this study, the convenience of rural tourism scenic spots is decomposed into the convenience of obtaining the information of rural spots, the convenience of external transportation, the convenience of rural spots' equipment and in-time service; The outlooks of a rural scenic area are divided into unique landscapes, bio-diversity, exquisite facilities. The cultural of rural tourism resources can be divided

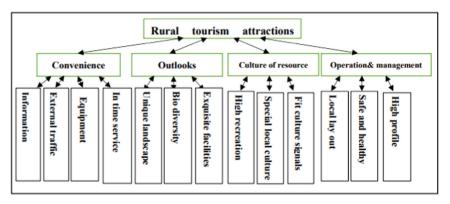


Fig. 1. The structure of rural tourism attractions

into high recreational characteristics, special rural culture and fit rural culture signals. The management of scenic spots is decomposed into local lay out style, safety and health, high profile.

#### 4.2 Use the Analytic Hierarchy Process (APH) Method

The study use the analytic hierarchy process (APH) based on the above factors of rural scenic attractions.

Assume A target layer is rural scenic attractions, criterion layers are convenience B1, the outlooks B2, the culture characteristics of rural resourcesB3, and the management of the tourism enterprise B4. The judgment layer are C1j, C2j, C3j, C4j, correspondingly, the convenience of obtaining the cultural and tourism information is C11, unique landscapesC21, high recreationC31, special local layoutC41, etc.. See Fig. 1.

#### 4.3 Construct the Judgment Matrixes According the Data from Investigation

Judgment matrix A—B:

$$A = \begin{bmatrix} 1 & 2 & \frac{1}{4} & \frac{1}{3} \\ \frac{1}{2} & 1 & \frac{1}{6} & \frac{1}{4} \\ 4 & 6 & 1 & 2 \\ 3 & 4 & \frac{1}{2} & 1 \end{bmatrix}$$

A	B1	B2	В3	B4	W	Conformance test index value
B1	1	2	1/4	1/3	0.122	$\lambda \max = 4.031$
B2	1/2	1	1/6	1/4	0.073	CI = $(\lambda \max -n)/(n-1) = 0.010$ RI = 0.90
В3	4	6	1	2	0.505	CR = CI/RI = 0.011 < 0.1
R4	3	4	1/2	1	0.300	

Table 1. Result of judgment matrix A—B

Judgment matrix  $B_1$ —C:

$$B_{1} = \begin{bmatrix} 1 & \frac{1}{6} & \frac{1}{2} & \frac{1}{4} \\ 6 & 1 & 4 & 3 \\ 2 & \frac{1}{4} & 1 & \frac{1}{3} \\ 4 & \frac{1}{3} & 3 & 1 \end{bmatrix}$$

Judgment matrix  $B_2$ —C:

$$B_2 = \begin{bmatrix} 1 & \frac{9}{8} & 8 \\ \frac{8}{9} & 1 & 9 \\ \frac{1}{8} & \frac{1}{9} & 1 \end{bmatrix}$$

Judgment matrix  $B_3$ —C:

$$B_3 = \begin{bmatrix} 1 & \frac{5}{3} & 6 \\ \frac{3}{5} & 1 & 7 \\ \frac{1}{6} & \frac{1}{7} & 1 \end{bmatrix}$$

Judgment matrix  $B_4$ —C (Tables 1, 2, 3, 4 and 5):

$$B_4 = \begin{bmatrix} 1 & \frac{1}{4} & \frac{4}{5} \\ 4 & 1 & 6 \\ \frac{5}{4} & \frac{1}{6} & 1 \end{bmatrix}$$

B1	C11	C <sub>12</sub>	C <sub>13</sub>	C <sub>14</sub>	W	Conformance test index value
C <sub>11</sub>	1	1/6	1/2	1/4	0.071	$\lambda \max = 4.088$
C <sub>12</sub>	6	1	4	3	0.545	CI = $(\lambda \text{ max } -n)/(n-1) = 0.029$ RI = 0.90
C <sub>13</sub>	2	1/4	1	1/3	0.119	CR = CI/RI = 0.032 < 0.1
C <sub>14</sub>	4	1/3	3	1	0.264	

**Table 2.** Result of judgment matrix B1—C

**Table 3.** Result of judgment matrix B2—C

B2	C21	C <sub>22</sub>	C <sub>23</sub>	W	Conformance test index value
C <sub>21</sub>	1	9/8	8	0.481	$\lambda \max = 3.006$
C <sub>22</sub>	8/9	1	9	0.463	$CI = (\lambda \max -n)/(n-1) = 0.003$
C <sub>23</sub>	1/8	1/9	1	0.056	RI = 0.58 CR = CI/RI = 0.052 < 0.1

**Table 4.** Result of judgment matrix B3—C

В3	C31	C <sub>32</sub>	C <sub>33</sub>	W	Conformance test index value
C <sub>31</sub>	1	5/3	6	0.531	$\lambda \max = 3.049$
C <sub>32</sub>	3/5	1	7	0.398	CI = $(\lambda \max -n)/(n-1) = 0.025$
C <sub>33</sub>	1/6	1/7	1	0.071	RI = 0.58 CR = CI/RI = 0.043 < 0.1

**Table 5.** Result of judgment matrix B4—C

B4	C41	C <sub>42</sub>	C <sub>43</sub>	W	Conformance test index value
C <sub>41</sub>	1	1/4	4/5	0.144	$\lambda \max = 3.044$
C <sub>42</sub>	4	1	6	0.710	CI = $(\lambda \text{ max -n})/(n-1) = 0.022$ RI = 0.58
C <sub>43</sub>	5/4	1/6	1	0.146	CR = CI/RI = 0.038 < 0.1

#### 4.4 The Analytic Hierarchy Process (APH) Results Analysis

Obviously, C31 > C42 > C32 > C12 > C43 > C41 > C33 > C21 > C22 > C14 > C13 > C11 > C23 in Table 6. Among the judgment layer of the attractions of rural tourist attractions, the characteristics of high recreation of scenic spots (C31) ranks first to the targeted guests, followed by the safety and health of scenic spots (C42), and the special characteristics of the local culture from scenic spots (C32), the first three judgement layers occupy 68.22% of all the attractions capabilities. The convenience

Criteria B	B1	B <sub>2</sub>	В3	B4	Each weighted index	Conformance test index value
Sub-criteria C	0.122	0.073	0.505	0.300		CI = 0.0230
C11	0.071				0.0087	RI = 0.6190
C12	0.545				0.0665	CR = CI/RI = 0.0372 < 0.1
C <sub>13</sub>	0.119				0.0145	
C <sub>14</sub>	0.264				0.0322	
C <sub>21</sub>		0.481			0.0351	
C <sub>22</sub>		0.463			0.0338	
C <sub>23</sub>		0.056			0.0041	
C <sub>31</sub>			0.531		0.2682	
C <sub>32</sub>			0.398		0.2010	
C <sub>33</sub>			0.071		0.0359	
C <sub>41</sub>				0.144	0.0432	
C <sub>42</sub>				0.710	0.2130	
C <sub>43</sub>				0.146	0.0438	

**Table 6.** Total ranking of all criteria layers of rural tourism attractions

Since CR = 0.0372 < 0.1, the consistency is established in the analytic hierarchy process.

of external transportation of scenic spots (C12), the high profile of scenic spots (C43), The local layout (C41), the fit cultural signals (C33), the unique landscapes(C21), the biodiversity(C22), the in-time service in the scenic spots (C14), are also important to the all capabilities, which weighted 29.05% to the total attractions capabilities. The convenience of scenic spots' equipment (C13), the convenience of cultural and travel information acquisition(C11) and the exquisite facilities (C23) influence the rural tourism attractions only 2.73%, which means rural tourists has less requirements to the external artificial equipment.

## 5 The Analysis of the Obstacles in the Integration of Tourism Industry and Rural Culture

### 5.1 The Process of Adopting Rural Culture is Complex When Developing Rural Tourism

There are consciousness culture, material culture and institutions culture among the local culture inherited by rural tourism. Such are the forms: (1) folk customs; (2) organization process of farming, fishing and animal husbandry; (3) inheritance of family tradition, ancestral temple culture, family governance and other inheritance; (4) special flavor snacks, Chinese medicine health, tea culture, etc.; (5) residential building culture, etc. Integrating these cultures requires a huge investment of human resources, material and financial resources.

As the saying goes, "the unique features of local environment always give special characteristics to its inhabitants". As rural tourism experience means to touch the local landscapes and native culture in a short time, one may miss the right place and the right clock, such as to appreciate the fauna and flora, even misunderstanding the implied meaning of the custom. For example, many places in China have the custom of eating a hundred of families' rice and sleeping a hundred families quilt that is made of many families clothes, the key point is not what to eat, but really to teach children to build harmonious interpersonal relationship with the neighborhoods and the relations; And the traditional folk buildings sometimes equipped with a sunken courtyard, reflect how to collect rain water (means money), and reflect how people avoid rainy wet when committing indoor activities in the south of Yangtze river area, which different from the north folk buildings.

Rural tourism is subject to slow-pace, low - price tourism, tourists are not sensitive to the prices, which is different from city fast and high - price tourism. The processes of displaying of cultural products are so complex that people need to use different art methods to represent the scenarios, which are very difficult to describe clearly in words.

### 5.2 Heterogeneity is Inevitable Between the Presentations of Local Culture and Tourist Experience

There are big contradictions between the extensiveness of local culture and the transience of tourism experience, the intangibility of tourism culture and the tangibility of tourism products, the popularity of local culture and the heterogeneity of tourists' pursuit, and the closed loop of local culture and the timeliness of tourism experience.

The presentations of local cultures in the rural tourism spots always apply to the folk specialists' interpretations, the artists' designs, the actors showing. The process of the integration of tourism and local culture involved in the rehearsals of the villages' history, the habits, the taboos, the local people's expressions of their spirits, the nature environments on a platform with the virtual reality (VR) and augmented reality (AR) technique, setting the intangible factors into the tangible products.

#### 5.3 Financial Risks Encounter the Rural Tourism Operation Frequently

Rural tourist market is easy to be effected by the contingencies, such as nature hazards, and bad operations. The products are too difficult to form the distinct characteristics to absorb the guests' repeating consumptions. Rural tourism enterprises are mostly small in scale and have an unstable income resources, they have no the capabilities to cope with even a slight financial riskiness. And "tourism industry + local culture" is subject to a new type of tourism enterprises, the rules and regulations suitable for its characteristics have not been so completed. All these characteristics lead rural tourism enterprises to encounter a greater financial risks frequently. The development and protection of local culture need a large amount of capital injection, and the cost of the capital is high, which forms a paradox with the short-term increase the farmers' income.

Rural tourism management also faces natural risks and social risks. Natural risk mainly comes from the extreme severe weather, infectious diseases, the influence of the social risk is mainly influenced by social, economic and cultural development, according

to the research from Philip Kotler, the higher income from the citizens, the more number of days of rural tour, but the importance of rural tourism passengers are from the local residents. At present, the large proportion of middle-aged workers working outside the countryside, the development of rural tourism is subject to social constraints.

### 6 Establish a Mechanism for the Integration of Tourism Industry and Local Culture in the Context of Rural Revitalization

### 6.1 Identify Different Tourism Needs Exactly and Build an Internal Driving Mechanism

Compared with urban tourism, rural tourism is characterized by relaxation, original ecology and lower travel costs. Rural tourism attractions with high recreational quality and distinct local culture can absorb high attentions, and the convenient transportation grantee the travel available, amazing landscapes with fit culture signal and local lay-out can stimulate tourists to stay at the places for a longer time. Most of the short-distance tourists prefer to high quality services, embracing a loose schedule arrangement and harvesting some traditional knowledge, skills, special experience.

Tourism enterprises need to establish effective internal driving mechanism to detect the real needs of the guests, and carry out an internal system of innovation to design the correct products with local cultural elements to meet the needs, and at last to collect the feedback information to modify the service contents.

### **6.2** Create Government Innovation System to Guarantee the Integration of Rural Tourism Industry and Local Culture

As we know, culture tourism industry has positive external feature, communities can benefit from the operating scenic spots no less than the companies, which asks to adopt the local governments to develop tourism industry. At first, the local government department for cultural tourism and human services can make a schedule on timely organization of folk artist, extraction of the local cultural heritage, folk inheritance, mining of history and culture, with the help of the local colleges and universities, scientific institutions, performance groups, to develop cultural formulations, etc.

At second, Cultural Tourism Departments should pay attention to the trends of new media, and organize tourism enterprises to use new Internet technology platform, advocate digital tourism marketing strategies, use tourism big data analysis, keep closely on the overall positioning of the tourism market, promote large tourism groups to enter the rural tourism business, niche the rural tourism market.

At last, the government should take strategies to improve the financing environment, formulate the Scenic Area Tourism Enterprise Guarantee Laws, and scenic area tourism enterprise financing laws, construct Evaluation Accounting System about scenic area tourism enterprise intangible assets. The establishment of policy financial institutions and tourism investment funds which energize tourism companies to promote the development of rural tourism sustainable.

### 6.3 Construct an External Coordination Environment for the Integration of Rural Tourism Industry and Local Culture

Distinctive features of the attractions are the bases of operating rural tourism industry. The integration of tourism industry and local culture should adhere to systematic thinking and focus on the construction of development different industries to produce the special features to the place.

Tourism companies can construct business associations to coordinate the public matters, such as broadcasting high profile of the place, advertising the local tourism, delivering special local culture and developing new tourism products according to the core competence from the local culture. And the companies need to strengthen the internal governance, absorb some aboriginal undergraduates to the companies to explain the local culture, aims to sustainable development of the rural tourism industry.

The local governments direct to optimize the combination of local cultural elements and tourism functions, reward the aboriginal undergraduates, meet the reasonable demands of stakeholders, such as decreasing the tax rate referred to agriculture industry, and improve the business environments, keep the development of regional economy, strengthen the chain supply of tourism products with manufacturing industry, promote upgrading rural tourism operation as well as agricultural industry, and improve the quality of tourism through absorbing cultural elements and scientific and technological factors.

#### 7 Conclusions

The light integration of rural tourism and local culture in China has been characterized as the operations subjects' integration, tourism field and the local culture integration, tourism industry and some rural culture sections' integration.

In order to improve the rural tourism quality, the further integration of rural tourism and local culture are necessary. So applying to the analytic hierarchy process (APH) method, the characteristics of high recreation, the safety and health, and the special characteristics of the local culture of the scenic spots are weighted 68.22% of all the attractions capabilities.

A mechanism for the integration of tourism industry and local culture in the context of rural revitalization need to be established. Firstly, rural tourism companies identify different tourism needs exactly and build an internal driving mechanism. Secondly, the local governments can create innovation system to guarantee the integration of rural tourism industry and local culture. Thirdly, the companies, local governments, the local residents need to construct an external coordination environment for the integration of rural tourism industry and local culture.

**Acknowledgments.** Supported by: Jiangxi Province Social Science "13th Five-year Plan" (2020) Fund Project "Research on the Integration Development Mechanism of Tourism Industry and Local Culture under the Background of Rural Revitalization" (No. 20GL30).

#### References

- Qu Yanchun, Song Ge. Analysis of Rural Culture Inheritance under the Rural Revitalization Strategy [J], Research on Ideological and Political Work. 2019 (12) 110-115
- 2. Fei Xiaotong, Rural China [M], People's Literature Publishing House, 2019(09)6—15
- 3. Zhou Xing. Rural Tourism and Folk Custom [J], Tourism Tribune 2019 (06) 4-7.
- 4. Zhang Suqiu, Gu Jiang, Wang Yingjie. Culture Tourism Integration Development Research on Knowledge Graph [J], Nan Jing Social Science 2020 (04) 142-48.
- LiuYang, XiaoYuanping. Logic and Transformation of Culture and Tourism Integration: an Investigation Based on the Practice Track of Tianlong Tunbao (1998-2018) [J], Business Economocs2020 (04) 129-137.
- P.Christou, R. Sharpley. Hospitality Offered to Tourists? A Rural Tourism Perspective [J]. Tourism Management 2018 (11) 39-51.
- T. Pilving, T. Kull, M. Suškevics, A.H. Viira. The tourism partnership life cycle in Estonia: Striving towards sustainable multi-sectoral rural tourism collaboration [J], Tourism Management Perspectives 2019 (05) 219-230.
- 8. Yiping Li, Heqing Zhang, Dian Zhang, Richard Abrahams. Mediating Urban Transition through Rural Tourism [J], Annals of Tourism Research 2019(01)152-164.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

