



# Analysis About Position and Distribution of Assets in Family That Do Not Have Children According to Nias Customary Law (Study in Banuagea Village, Tuhemberua District, North Nias Regency)

Rismawati Gea<sup>(✉)</sup> and Siti Chadijah

Universitas Pamulang, Tangerang, Indonesia  
rismawatigea0@gmail.com

**Abstract.** Customary inheritance law is related to customary rules and instructions in the process of passing on and distributing inheritance from generation to generation, so it is closely related to inheritance issues. In the distribution of an inheritance, there are three basic elements: the existence of an heir; the presence of an heir; and the possession of an inheritance. The application of customary inheritance law can be seen in this study. The authors conducted research on the distribution of inheritance without heirs in the Nias community, where there are families who do not have children as successors of inheritance, causing conflicts between families and even criminal acts. This study uses a socio-legal approach, namely a legal research approach that uses the assistance of social sciences so that it can explore data and information as much as possible about how the position and process of dividing the inheritance of families who do not have children according to Nias customary law in Banuagea Village, District, Tuhemberua, North Nias Regency. The process of distributing family inheritance in Banuagea Village, Tuhemberua District, North Nias Regency is carried out in a family manner to carry out joint deliberation involving the family of a man who has no children, traditional authority and village chief.

**Keywords:** Customary Law · Inheritance · Nias · Banuagea Village

## 1 Introduction

Every human will certainly face legal events, one of which is death or death, and by law, when an event of death occurs, it is a consequence of the law as to how the application and application of the rights and obligations of a rich person are passed on to the living person. The settlement of rights and duties as a result of one's death is administered within the law of inheritance. The legal terms of inheritance until now are both Indonesian legal experts and in the legal literature of Indonesian law. There is no common sense and common sense, some using terms of inheritance law, inheritance law, and inheritance law. In other words, the division of the inheritance can also be done according to local customs and habits.

© The Author(s) 2023

A. J. Meliala et al. (Eds.): INCOLS 2022, ASSEHR 688, pp. 158–167, 2023.

[https://doi.org/10.2991/978-2-494069-23-7\\_15](https://doi.org/10.2991/978-2-494069-23-7_15)

According to Soepomo, customary laws of inheritance contained rules governing the process of applying and operating material goods and intangible objects (immateri- alizing) of a human generation (generatio) of his descendants. Therefore, the hereditary nature of the tribal law required an heir, the presence of an heir, the presence of an heir, and the operation of an heir.

The heir's law thus contained the provisions governing the application and transfer of wealth (fleshly or intangible) of the heir to its heirs. The application and transition of that wealth may have been valid from the time the heir lived or after the heir passed away. Customary inheritance law is the entire legal regulation and customary instructions that regulate the transfer and transmission of inheritance with all its consequences, whether carried out while the testator is still alive or after death. The transitional form can be done by way of appointment, surrender, power of attorney, or transfer of ownership.

The issue of inheritance is related to the legal rules governing the process of how to pass on and pass the inheritance or inheritance passed on or divided from the heir to the heirs and from generation to generation. So, in this case, the problem of inheritance is closely related to the problem of inheritance. This means that it is not only limited to assets but includes debts made by the heir during his lifetime, which he then leaves when he dies, which is an inheritance or passed on to his heirs.

The indigenous peoples of Indonesia have their own customary law of inheritance. Usually, their customary law is influenced by the family system and the marriage system they follow. Inheritance law that applies to Indonesian people until now is still pluralistic, that is, some are subject to civil inheritance law, Islamic inheritance law, and customary inheritance law. Indonesian society, which consists of various ethnic groups, has customs and customary laws that vary from one another and have their own characteristics that make customary law, including inheritance law, pluralistic as well, not to mention the Nias tribe, which is known among the people of North Sumatra. They have a variety of customs, including the law of inheritance.

The Nias tribe, which is part of the territory of the Unitary State of the Republic of Indonesia, also has a way of implementing inheritance distribution. Initially, the government was only one government area. Starting in 2003, the South Nias Regency was established, which was then followed by Gunungsitoli City, West Nias Regency, and currently North Nias Regency. Nias Island is divided into 4 (four) regencies and 1 (four) regency, one) city.

Nias is an area that adheres to a patrilineal culture where the position of boys has the main position in the lineage. Generally, in the customs of a patrilineal society, the person who can inherit the inheritance is the person who continues the lineage. This means that the grip of patriarchal culture is also sharp on the family inheritance.

The distribution of inheritance according to customary inheritance law in Nias, the source of which is taken from research in Banuagea Village, Tuhemberua District, North Nias Regency, the implementation of inheritance distribution according to North Nias customary law, where the implementation of inheritance distribution is mandatory so as not to cause chaos in the future. The heirs before distributing the inheritance are obliged to carry out a fanganro howu-howu feeding event for the heirs, in this case, the parents (father and mother). After that, the heir distributes his inheritance to each of his heirs in the presence of the other family members present. However, if there is a problem at a

later date in the distribution of the inheritance, if there is a dispute, it will be resolved amicably by sitting together in the presence of witnesses who previously witnessed the process of dividing the inheritance by the testator before he died.

If the heir has no descendants/heirs to continue his wealth, as has happened to the husband and wife pair A/I. Tini Nazara in Banuagea Village, Tuhemberua District, North Nias Regency, where during the marriage she had not been blessed with a child. After they died and had not left a will, several parties from their respective families fought and claimed the property to be inherited, causing conflicts and disputes and even criminal acts, this is one of the reasons behind the research entitled “ANALYSIS ABOUT POSITION AND DISTRIBUTION OF ASSETS IN FAMILY THAT DO NOT HAVE CHILDREN ACCORDING TO NIAS CUSTOMARY LAW (Study in Banuagea Village, Tuhemberua District, North Nias Regency)”.

Based on the description of the background of the problem above, the problem can be formulated as follows:

1. What is the position of the inheritance left by a family without children in Banuagea Village, Tuhemberua District, North Nias Regency?
2. How is the process of distributing the inheritance according to customary law to the community in Banuagea Village, Tuhemberua District, North Nias Regency?

Based on the problems mentioned above, the objectives to be achieved in this research are:

1. To find out and understand the position of the inheritance of families who do not have children in Banuagea Village, Tuhemberua District, North Nias Regency.
2. To know and understand the process of distributing the inheritance in Banuagea Village, Tuhemberua District, North Nias Regency.

## **2 Legal Materials and Methods**

The type of research used in this research is empirical research, namely research procedures that produce descriptive data in the form of written or spoken words from people and observable behavior. Empirical research presents the problems studied and actually occurring in the field.

In this study, the socio-legal approach is used, which is a type of legal research that uses the social sciences to find out as much as possible about the position and process of dividing the inheritance of families without children according to Nias customary law in Banuagea Village, District, Tuhemberua, North Nias Regency.

The research specification used to do this research is descriptive. It gives an overview of the real facts related to the research done from several customary regulations, specifically about the position and distribution of inheritance for families without children according to Nias customary law in Banuagea Village, Tuhemberua District, North Nias Regency.

Sources of data in completing this writing, there are several legal materials to complete this research, including:

1. Primary legal materials are research data obtained directly from the source, either directly or indirectly through interviews. In this study, the primary legal material is the law that applies to the Nias Indigenous community in Banuagea Village, Tuhemberua District, North Nias Regency.
2. Secondary Legal Materials are data obtained from literature books on Nias customary inheritance, research results and writings by legal experts, legal magazines, and others
3. Tertiary legal materials are legal materials that can provide instructions or explanations for primary and secondary legal materials. In writing this research, the tertiary legal materials are dictionaries, encyclopedias, and others.

The location of the research in completing this writing was carried out in the North Nias Regency, namely in Banuagea Village, Tuhemberua District. The selection of this research location was based on community factors in terms of culture and customs that exist in the Nias region. The research location is a place where research is carried out to find knowledge.

Data collection techniques in this paper use 2 (two) methods, namely:

1. Library Research, namely by conducting research on various reading sources, namely books, legal magazines, expert opinions, statutory regulations, and also documents related to the object of research.
2. Interview technique (interview), namely data retrieval carried out through oral communication activities in structured, semi-structured, and unstructured forms, whose implementation can be individually or in groups. Completing the research data, additional information is needed from other informants, namely people who are considered to know and are competent with the object of research as informants, consisting of:
  - a. The traditional head of Banuagea Village (*satua hada*) 1 person;
  - b. Village head 1 person;
  - c. Heirs of 2 people;
  - d. Community Leaders in Banuagea Village (*niha mbanua*) 3 people.

In this study, the data analysis used was qualitative. According to Bogdan and Taylor, qualitative method is a research procedure that produces descriptive data in the form of written or spoken words from people or observable behavior. Qualitative research presents the problems studied and actually occurring in the field. In qualitative research, after the data in the field is obtained, then the data is analyzed by presenting the data in the form of a narrative, describing the data findings in the form of a sentence description, or a chart of relationships between categories that are sequential and systematic. Next, draw conclusions. Conclusions are drawn using an inductive technique without generalizing one finding to other findings.

The data obtained in the literature study on customary law of inheritance and interviews with informants, namely traditional leaders, village officials, heirs, and also the community directly related to the problem, were processed and analyzed to answer the

formulation of the problem in this study, namely to determine the position of inheritance families without children and how to distribute the inheritance according to Nias customary law.

### 3 Research Results and Discussion

#### 3.1 Analysis of the Position of Inheritance of Families Who Have no Children in Nias Indigenous Peoples in Banuagea Village, Tuhemberua District, North Nias Regency

Basically, every family wants to have children because children are those who can continue the offspring of their parents and become heirs when their parents die. But in real life, not all families have children. The family will feel incomplete without the presence of children, where children are the fruit of a marriage.

In the Nias customary law community, kinship is patrilineal (following the father's lineage), where the position of sons is higher than that of girls. In terms of inheritance, only sons are entitled to become heirs because sons are the successors of their parents' descendants, while daughters are not heirs, because if a daughter is married, she is considered to have left her parents' kinship and follows her husband's kinship.

In Nias society, when a son marries, his parents usually stay at home for one, two, or three years until the first child is born. So, it's clear that in the Nias Indigenous community, only the son carries on the family line. When a daughter gets married, her kinship shifts to the relatives of her husband, which means she has to leave her parents' house to live with her husband.

Nias customary inheritance law adheres to a patrilineal system, which is a system in which, according to the lineage of the father, property is dominated by men while women cannot share at all. The position of men is more prioritized than women. In general, the boys get an equal share, as opposed to before, when the eldest son got a larger share.

In the distribution of family inheritance, if the husband dies and leaves a wife and children, the wife replaces the husband's position as an heir, not as an heir and the children as his heirs. The wife has the right to manage and maintain the inheritance from her husband throughout her life or as long as the wife does not remarry another person. If the wife remarries, she will automatically leave her late husband's family ties and all of her late husband's inheritance to his parents or male siblings, who will then give it to the rightful heirs.

If the wife dies and has no children, then the entire property belongs to the husband, even though the husband will remarry another woman, this is due to the Nias custom which in the inheritance system uses the male lineage. However, if you have children, your descendants will automatically be the heirs who are entitled to the assets.

From the results of the research conducted, the assets inherited by the Nias customary law community in Banuagea Village, Tuhemberua District, North Nias Regency are inherited assets, namely the assets of each husband and wife obtained through inheritance or gifts from parents, and joint marriage assets, namely property acquired during the marriage, according to the findings of the research..

According to Mr. Tolasokhi Gea, one of the traditional leaders in Banuagea Village, Tuhemberua District, North Nias Regency, the study's findings revealed that both of

them died and had children. If he does not have children, the inheritance will be transferred or inherited to the husband's family, specifically the husband's parents (*zatu ndronga ira matua*), or if the husband's parents have died, the brother-in-law (*talifuso ira matua*), who will act as a substitute for the inheritance's heirs. If the heir does not have a brother, the heir to the inheritance is the son of the heir's parent's brother, or in the Nias language, known as *ono matua moroi khe dana nama*. If the brother of the heir's parents (*dana nama*) also has no male offspring, the heir will be the sister of the heir (in Nias society this is known as *talifuse ira alawe sokho harato*). If the heir does not have a sister, the heir will return to the lineage of the heir's grandfather, which in Nias society is known as the old *nga'oto*. However, if a husband and wife adopt a son, the heir is the adopted child, while if their adopted child is a woman, the adopted child is not entitled to become an heir unless the husband and wife leave a will that specifies that their adopted daughter is the heir of his wealth.

Based on the results of interviews with Mr. Desman Nazara and Anotona Nazara, as heirs of the A/I family. Mr. Desman Nazara said that Tini Nazara has no children in Banuagea Village, Tuhemberua District, North Nias Regency, so all the inheritance from the family will be passed on to the male family. I am one of them as the brother of the late A. Tini Nazara. Mr. Anotona Nazara also added that during the lifetime of our brother A/I. Tini Nazara, there were no adopted children.

Based on the results of an interview with Mr. Yasozaro as a community leader in Banuagea Village, Tuhemberua District, North Nias Regency, the position of the inheritance of a family without children will be inherited by the family of the husband, namely the husband's parents and the husband's brother, with the distribution being made by means of deliberation within the family to discuss what assets are distributed.

According to Mr. Taliwanolo Gea, if a family without children in Banuagea Village, Tuhemberua District, North Nias Regency, has an adopted son, the entire inheritance will be passed on to the adopted child, but if the adopted child is a girl, the adopted child is not entitled to the inheritance of his adoptive parents unless during his life the adoptive parents have made a will for their adopted daughter.

From the results of the research that has been carried out, according to Mr. Fatolosa Gea, as a community leader in Banuagea Village, Tuhemberua District, North Nias Regency, the assets inherited by the indigenous people of Nias in Banuagea Village, Tuhemberua District, North Nias Regency are inherited assets, which each husband and wife obtained from inheritance or gifts (*masi-masi zatua*) from their parents, after marriage will become joint property and joint property during marriage, namely assets obtained during the marriage period. Husband and wife who do not have children, inheritance, both inherited and joint assets during marriage, will be inherited by the male family. A woman's family has no right because, after a woman gets married, she automatically leaves her parents' kinship and follows her husband's family kinship.

Based on the results of interviews conducted, Mr. Desman Nazara said that the share of heirs from the inheritance of families who do not have children is determined based on deliberation with the family, where the distribution is greater to heirs who during the life of the heir take care of and help the heir.

### **3.2 The Process of Distribution of Assets of Family that Have no Children According to Nias Traditional Law in Banuagea Village, Tuhemberua District, Nias Utara Regency**

Based on the results of interviews with informants, in the Nias community in Banuagea Village, Tuhemberua District, North Nias Regency, the inheritance distribution process is carried out directly between the families concerned. The distribution of inheritance for families who do not have children in Banuagea Village has several stages, namely:

1. Deliberation between the male family, namely the family will discuss what assets will be inherited and who will be entitled to become heirs.
2. The deliberation of the male family, traditional leaders, and village officials, namely the family, discusses the share of each heir and the traditional leaders and village officials as mediators and witnesses between heirs, in accordance with customary law that applies in the community in Banuagea Village, Tuhemberua Subdistrict, North Nias Regency, the distribution of inheritance for heirs who, during the life of the heirs, manage and help the heirs get a bigger share than other heirs.
3. The deliberation of the male family, traditional leaders, and village officials, namely the family, discusses the share of each heir and the traditional leaders and village officials as mediators and witnesses between heirs in accordance with customary law that applies in the community in Banuagea Village, Tuhemberua Subdistrict, North Nias Regency, the distribution of inheritance for heirs who, during the life of the heirs, manage and help the heirs get a bigger share than other heirs.

Based on the results of an interview with Mr. Anotona Nazara, if a married couple who do not have children is still alive, then the process of dividing the inheritance is carried out by means of deliberation to reach a consensus with the parties entitled to the inheritance. The husband and wife pair who do not have children collect their relatives to discuss that they will give and hand over their inheritance to the rightful heirs if they have died. However, if this husband and wife have died and the inheritance has not been divided, then according to the results of the consensus made during their lifetime, it will be distributed to the heirs they appoint. If the husband and wife do not appoint rightful heirs and do not have adopted children during their lifetime, and then die, all of the entitled inheritance passes to the man's family, namely the husband's parents and brothers, through a family division process.

Based on the results of an interview with Mr. Fatolosa Gea, in practice, the distribution of inheritance between husband and wife who do not have children does not need to be in accordance with customary provisions. It can be distributed by means of deliberation between families only. If deliberation has been carried out and there are no problems with the inheritance, there is no need to invite village officials and traditional leaders. However, if in the deliberation there is a problem regarding the distribution of the inheritance, this is where the role of village officials and traditional leaders is to solve it. The heirs who have rights to family property but do not have children gather and invite village officials and traditional leaders as intermediaries to complete the distribution of the inheritance, in accordance with the provisions of customary law that applies to the indigenous people of Nias in Banuagea Village, North Nias District, Kabupaten Nias North Nias.

## 4 Conclusions and Suggestions

### 4.1 Conclusion

Based on the results of research and discussion on the analysis of the position and distribution of inheritance for families without children according to the Nias indigenous people in Banuagea Village, Tuhemberua District, North Nias Regency, it is concluded several things as answers to the problems of this research as follows:

1. The position of the inheritance of a family without children, according to Nias customary law in Banuagea Village, Tuhemberua District, North Nias Regency, the inheritance will be inherited by the male family member (husband), namely the male parent. If the man has died, the right to be heir is the husband's brother (talifuse rhythmtua zokho harato). If the heir does not have a brother, then the heir to the inheritance is the son of the heir's parents' brother, or in the Nias language, known as ono matua moroi khe dana nama. If the brother of the heir's parents (dana nama) also does not have male offspring, then the heir will be the sister of the heir (in Nias society this is known as talifuse ira alawe sokho harato). If the heir does not have a sister, then the heirs return to the lineage of the heir's grandfather, which in Nias society is known as old nga'oto. However, if a husband and wife adopt a son, the heir will be their adopted child, while if their adopted child is a woman, then the adopted child is not entitled to become an heir unless the husband and wife leave a will that includes their adopted daughter, who is the heir of the family. his wealth.
2. The process of distributing family inheritance in Banuagea Village, Tuhemberua District, North Nias Regency is carried out in a family manner to carry out joint deliberation involving the families of men who do not have children, traditional leaders, and village officials, with the distribution of inheritance, namely:
  - a. If the husband and wife who do not have children are still alive, then the process of dividing the inheritance is carried out by means of deliberation to reach a consensus with the parties entitled to the inheritance. The husband and wife who do not have children gather their relatives to discuss that they will give and hand over their inheritance to the rightful heirs if they have died.
  - b. If the husband and wife who didn't have children have died and the inheritance hasn't been split, it will be given to the people they chose as heirs based on what they agreed on during their lives.
  - c. If during their lifetime the husband and wife have not appointed the rightful heirs and have not adopted children, and then die, then all of the entitled inheritance belongs to the family of the man, namely the husband's parents and brother.

### 4.2 Suggestion

Based on the research that I did and referring to the conclusions mentioned above, there are several suggestions that are felt to be very necessary, namely:

1. In the distribution of inheritance for families who do not have children in Banuagea Village, Tuhemberua District, North Nias Regency, apart from traditional leaders and



village officials who are witnesses, a statement letter should also be made containing the distribution and who is entitled to the inheritance for later as written evidence so that in the future there will be no mutual claims between the family and causing problems.

2. For the people of Banuagea Village, Tuhemberua District, North Nias Regency, it is important to keep the customary law process for distributing family inheritances. Those who do not have children can make a will to solve the problem of who gets their inheritance.

## References

1. Utomo, Laksono. 2016. *Hukum Adat*, 99. Jakarta: PT. Raja Grafindo Persada.
2. Sembiring, Rosnidar. 2021. *Hukum Waris Adat*, 14. Depok: PT. Raja Grafindo.
3. Hadikusuma, Hilman. 2014. *Pengantar Ilmu Hukum Adat Indonesia*, 203. Bandung: Mandar Maju.
4. Results of interview with Mr. Tolasokhi Gea, as one of the traditional leaders in Banuagea village, Tuhemberua District, North Nias Regency on September 12, 2021.
5. Moleong, Lexy J. 2002. *Metode Penelitian Kualitatif*. Bandung: PT. Remaja Rosda Karya.
6. Harahap, Nursapiah. 2020. *Penelitian Kualitatif*, 69. Sumatera Utara: Wal Ashri Publishing.
7. Otje Salman Soemadinigrat, H.R. 2002. *Rekonseptualisasi Hukum Adat Konteporer*, 195. Bandung: PT Alumni.
8. Results of interview with Mr. Tolasokhi Gea, as one of the traditional leaders in Banuagea Village, Tuhemberua District, North Nias Regency on February 26, 2022.
9. Results of interview with Mr. Desman Nazara, on February 24, 2022.
10. Results of interview with Mr. Yasozaro Gea, on February 28, 2022.
11. Results of interview with Mr. Tolasokhi Gea, as one of the traditional leaders in Banuagea Village, Tuhemberua District, North Nias Regency, on February 26, 2022.
12. Results of interview with Mr. Anotona Nazara, on February 24, 2022.
13. Results of interview with Mr. Fatolosa Gea, on February 27, 2022.
14. Ali, Achmad. 2009. *Menguak Teori (Legal Theory) dan Teori Peradilan (Judicial Prudence)*. Jakarta: Kencana Prenadamedia Group.
15. Sunggono, Bambang. 2003. *Metedologi Penelitian Hukum*, Jakarta: PT. Raja Grafindo Persada.
16. Muhammad, Bushar. 2002. *Asas-asas Hukum Adat Suatu Pengantar*. Jakarta: PT. Pradnya Paramita.
17. Sudiyat, Iman. 1978. *Hukum Adat*. Sketsa Azas, Yogyakarta: Liberty.
18. Laia, A.A. 1973. *Sejarah Hukum Nias dan Adat Istiadat: Untuk Kalangan Sendiri*. Gunungsitoli.
19. Sulistiani, Siska Lis. 2021. *Hukum Adat di Indonesia*, Jakarta: Sinar Grafika.
20. Wignjodipuro, Surojo. 1973. *Pengantar dan Azas-Azas Hukum Adat*. Bandung: Alumni.
21. Dwi, Poespasari Ellyne. 2018. *Pemahaman Seputar Hukum Waris Adat di Indonesia*. Jakarta: Kencana.
22. Hamidjojo, Prodojojo. 2000. *Hukum Waris Indonesia*. Jakarta: Stensil.
23. Siska Lis Sulistiani, *Hukum Adat di Indonesia*, Jakarta: Sinar Grafika, 2021.
24. Aburaerah, Sukarno. 2017. dkk., *Filsafat Hukum Teori dan Praktik*, Jakarta: Kencana.
25. Rahman, Syamsuddin. 2019. *Pengantar Hukum Indonesia*. Jakarta: Kencana.
26. Yulia. 2016. *Buku Ajar Hukum Adat*. Sulawesi: Unimal Press.
27. Arsyhadie, Zaeni. 2021. dkk., *Prinsip-prinsip Kewarisan di Indonesia*, Depok: PT. Raja Grafindo Persada.

28. Halawa, Martinu Jaya. 2018. Kedudukan Ahli Waris dalam Waris Adat Nias (Penelitian pada Masyarakat Nias di Kecamatan Boronadu Kabupaten Nias Selatan).
29. Laoli, Memori Perdamaian. 2017. Pelaksanaan Pembagian Warisan pada Masyarakat Adat Nias (Studi pada Masyarakat Adat Nias di Kabupaten Nias Selatan). *Premise Law Journal* 1: 164998.
30. Suryani, Euis. 2018. HAK AHLI WARIS ATAS PEWARIS YANG TIDAK MEMILIKI KETURUNAN MENURUT KOMPILASI HUKUM ISLAM (Studi Putusan Nomor 5/Pdt. P/2015/PA. Rks. Diss., Universitas Sultan Ageng Tirtayasa.
31. Ramadhan, Syahrul. 2018. Tidak Memiliki Keturunan Sebagai Penghalang Kewarisan Pada Masyarakat Desa Peugayo, Kecamatan Simpang Kiri Kota Subulussalam, Aceh (Tinjauan Khi). Diss. Universitas Islam Negeri Sumatera Utara Medan.
32. Dewantara, Fery. 2013. Kedudukan Harta Warisan Suami Istri Yang Tidak Mendapatkan Keturunan Menurut Hukum Adat Serawai Di Kecamatan Semidang Alas Maras Kabupaten Seluma. Universitas Bengkulu.
33. UUD 1945 pasal 18b tentang Pemerintah Daerah.
34. KUHPerdara Pasal 1571 tentang Berakhirnya Sewa Menyewa Lisan Tanpa Batas Waktu.
35. <http://niasutarakab.go.id/home/petawilayah>.
36. <http://niasutarakab.go.id/home/kecamatanantu>.

**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.

