

DEVELOPMENTS AND ACTIVITIES IN 2016-2017

Forest and Nature Conservation Policy Group in short

The Forest and Nature Conservation Policy Group (FNP) is a social science group that contributes to scientific and societal debates about forest-nature-people relationships in different localities and at different scales.

FNP's framework for research is called the practice based approach. This framework for research is based on the idea that the interactions between people, forests and nature can best be understood as context specific practices. FNP's research activities take place in different locations all over the world and at different levels that range from the local to the global.

FNP offers a wide range of courses in different educational programmes such as the bachelor's

programme Forest and Nature Management (BBN), the master's programme Forest and Nature Conservation (MFN), the Sustainable Development Diplomacy track (SDD) and various PhD courses and education opportunities such as summer schools.

The FNP chair group had the following composition in 2016-2017:

- 3 Professors
- 5 Assistant Professors
- 2 Lecturers
- 32 PhD researchers
- 3 Visiting Professors
- 8 Guest lecturers and researchers
- 1 Secretary
- 1 Administrator

FNP highlights

In 2016 and 2017 several memorable events occurred within FNP. Two new professors held their inaugural addresses: Prof. dr. Esther Turnhout on the Politics of Environmental Knowledge on June 2nd 2016 and Prof. dr. Hens Runhaar on Nature-Inclusive Agriculture on September 22nd 2016.

In 2016, Two PhD candidates affiliated with FNP graduated: Dr. Maryia Mandryk on climate change adaptation in Dutch agriculture and Dr. Kwame Oduro on forest management future scenarios in Ghana. In 2017 Dr. Robert Ochieng and Dr. Theo van der Sluis received their doctor's degrees on the role of forests in climate change mitigations and on landscape transitions in Europe respectively.

In terms of output, 2016 and 2017 were very productive years: 123 scientific publications (of which 86 are refereed journal papers), 28 professional publications and many other outputs (popular articles, key note speeches, blogs, invited lectures and media appearances). Also outside academia we aim for impact. For example, FNP organized and participated in workshops with

farmers, policy representatives and other practitioners on agri-environmental schemes in the Netherlands.

Students numbers are still rising: the BSc Forest and Nature Management is now followed by about 95 students in their 1st year, and the 1st year of the MSc Forest and Nature Conservation's had 110 students in 2017.

In 2016, FNP started to participate in the EU H2020 ALTERFOR project on alternative forest management models for Europe's future and executed a research project on the biodiversity impact of sustainable use practices such as forest certification, community forestry and forest restoration, for the Dutch Environmental Assessment Agency.

FNP's PhD candidate Robert Ochieng won the best student's paper prize at the Annual Earth System Governance Conference, which convened in Nairobi, Kenya, in 2016. This is an outstanding achievement.

RESEARCH

The three research themes of Forest and Nature Conservation Policy Group operationalize the FNP practice-based approach. These three themes also connect to established approaches in environmental sociology, policy studies, economics, political

ecology, and social studies of science and technology. Each theme is linked to concrete research projects.

FNP's Research Themes

- Knowledge, professionals, and expertise

This focuses on the dynamics of knowledge production for forest and nature conservation, management and governance. It conceptualizes knowledge production in itself as a social practice and asks how knowledge is co-produced by humans and nature, how it performs in practice, and with what implications. Current research focuses on:

- the tensions between participation and scientific and professional expertise in the context of the rise of participatory and decentralized forms of governance on the one hand and managerial and evidence based forms of governance on the other;
- the role of science-based discourses in environmental governance and the power/knowledge dynamics that operate in these.

- Participation, private actors and public engagement

This theme focuses on the role of private actors, including forest owners and managers, market parties, citizens, communities and civil

society in practices of governance, management and conservation. Current research includes:

- innovative multi-actor institutional arrangements (e.g. community based natural resource management, partnerships, or payment for ecosystem services) and their contribution to sustainability and legitimacy;
- practices of engagement through which private actors and citizens express their identity and connection with their environment.

- The global-local nexus

This focuses on the interconnectedness of different national, global and local levels of governance. It draws attention to how these levels are not fixed but form a dynamic network of interconnected practices. Research focuses on:

- the role of specific actors, networks, institutions and technologies that connect different levels of governance and make governance at a distance possible.
- how international and national institutions, rules, standards and policies appear and acquire meaning in local practices of forest and nature conservation management.

FNP Research highlights

FNP has joined a number of national and international research projects: two of them are highlighted below.

FOREFRONT

FNP is a partner in the interdisciplinary FOREFRONT program a collaboration between Wageningen University, the Federal University of Viçosa, Brazil, and two research institutes in Mexico: IIES (Instituto de Investigaciones en Ecosistemas y Sustentabilidad, part of the Universidad Nacional Autónoma de México) and Ecosur (El Colegio de la Frontera Sur). The project started early 2016 and will run until the end of 2020. The FOREFRONT program focuses on agro-forest frontier areas, the dynamic borders between forested and agricultural land. The research aim is to link the landscape-transforming strategies of the various actors with landscape changes and resulting ecosystem services (see <http://www.wur.nl/en/Expertise-Services/Collaboration-and-partnerships/FOREFRONT-Program.htm>). FNP researchers Bas Arts, Esther Turnhout, Jelle Behagel lead three PhD projects in the state of Minas Gerais in Brazil that focus on the role of agroecology in sustainable land use. Lucas de Carvalho's research will develop scenarios for sustainable land use, Leonardo van den Berg investigates the social and political dynamics of agroecology, and Margriet Goris' research uses visual methods to understand and enhance agroecological practices.

ALTERFOR

Silvicultural methods have evolved in response to historic conditions and are often confined to a national or regional setting. Are they adequate to meet the challenges of the 21st century? The goal of the ALTERFOR project is to provide improved and new approaches that are robust enough to address the pressures of increased use of bioenergy and uncertainties such as climate change, the complex dynamics of evolving global markets, and the increased focus on forest's social values. An international consortium of research organizations and forest owner associations, forestry authorities as well as forest societies, led by the Swedish University of Agricultural Sciences (SLU), has been developing and testing new forest management models in case study areas that cover representative forested landscapes in Europe. Marjanke Hoogstra-Klein and Bas Arts from FNP lead the project for the Dutch side (see <https://www.alterfor-project.eu/>). The project partners from eleven countries are evaluating improved management models under different future climate change scenarios and with respect to desired ecosystem services such as biodiversity conservation, timber production and cultural values. To be of value for policy makers and practical forestry, the analyses will incorporate the behaviour of forest owners and managers.

Inaugural Addresses and Dissertations

In 2016-2017 two new FNP professors and four PhD candidates performed scientifically in public, having their inaugural speeches and PhD defences in the Aula of Wageningen University.

Esther Turnhout (2016): *The politics of environmental knowledge*

Inaugural lecture upon taking up the position of personal professor in The politics of environmental knowledge on June 2nd 2016.

The inaugural lecture can be watched at <http://wurtv.wur.nl/p2qplayer/Player.aspx?id=bhqjAP> and the booklet can be downloaded from <https://edepot.wur.nl/410391>

Hens Runhaar (2016): *Towards 'nature-inclusive' agriculture*

Inaugural lecture upon taking up the position of special professor of Management of Biodiversity and Agricultural Landscapes on September 22nd 2016.

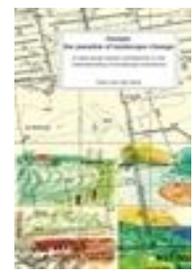
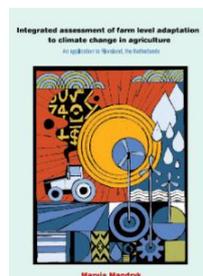
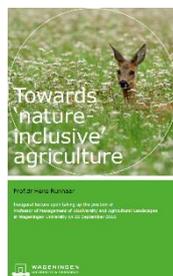
The inaugural lecture can be watched at <http://wurtv.wur.nl/p2qplayer/Player.aspx?id=eqInBq> and the booklet can be downloaded from <http://edepot.wur.nl/389369>

Maryia Mandryk (2016): *Integrated assessment of farm level adaptation to climate change in agriculture: an application to Flevoland, the Netherlands*; dissertation at <https://edepot.wur.nl/375706>

Kwame A. Oduro (2016): *Ghana's high forests: trends, scenarios and pathways for future developments*; dissertation at <https://edepot.wur.nl/378343>

Robert M. Ochieng (2017): *The role of forests in climate change mitigation : a discursive-institutional analysis of REDD+ MRV*; dissertation at <https://edepot.wur.nl/412210>

Theo van der Sluis (2017): *Europe: the paradox of landscape change; a case-study based contribution to the understanding of landscape transitions*; dissertation at <https://edepot.wur.nl/424508>



FNP publications and achievements

With a total of 159 outputs over the two years, the FNP Group continues to show an increasing growth, 77% of which were scientific publications. The other publications and outputs include a variety of

professional publications and other outputs such as invited lectures, media appearances, panel discussions and presentations at workshops and seminars.

Output FNP in numbers	2016	2017
Scientific publications		
PhD theses (promotor at FNP)	2	2
Refereed articles in a journal	38	48
Non-refereed articles in a journal		1
Refereed book chapters	8	3
Non-refereed book chapters	1	1
Refereed conference papers	5	
Non-refereed conference papers	8	4
Inaugural speeches	2	
Total scientific publications	64	59
Professional publications		
Articles in journals	7	3
Reports	11	7
Other output		
Journal editorships		4
Abstracts		4
Total	82	77

Some FNP key publications

Publication in Journal of Environmental Policy & Planning (2017):

Beyond argumentation: a practice-based approach to environmental policy

Jelle H. Behagel, Bas Arts & Esther Turnhout.

Abstract: We propose that a practice-based approach to environmental policy can help consolidate theoretical understanding of and empirical focus on practices in IPA. Doing so counteracts a tendency to privilege knowledge and discourse in IPA and environmental policy analysis. We draw on multiple strands of practice theory to inform three sensitizing concepts: situated agency, logic of practice, and performativity. These concepts provide the analytical tools to investigate how social order and social change originate from the entanglement of meaning and action in practice. We illustrate these concepts by applying them to practices of community forest management in the countries of Ethiopia and Tanzania. Our analysis suggests that a practice-based approach is able to offer nuanced and empirically grounded accounts of political struggles and democratic practices. Its potential is especially strong in cases where policy-making and policy ideas and outcomes are less clearly linked to argumentative processes. We conclude by arguing for further inclusion and consolidation of practice-based approaches within the tradition of interpretive policy analysis.

<https://www.tandfonline.com/doi/full/10.1080/1523908X.2017.1295841>

Publication in Current Opinion in Environmental Sustainability (2016):

Active citizenship for urban green infrastructure: fostering the diversity and dynamics of citizen contributions through mosaic governance

Arjen E. Buijs, Thomas J.M. Mattijssen, Alexander P.N. van der Jagt, Bianca Ambrose-Oji, Erik Andersson, Birgit H.M. Elands & Maja Steen Møller.

Abstract: Active citizens may contribute to the environmental, social, and institutional resilience of cities. This review discusses how citizen initiatives protect biodiversity hotspots, contribute to social cohesion, institutional innovation, and diversity in urban green space management. Challenges related to social inclusiveness, ecological connectivity and continuity suggest government involvement is pertinent, but needs to be refocused.

To maximize environmental outcomes of active citizenship, governments may adopt an enabling and stimulating governance style that harnesses the transformative potential of active citizenship. This paper argues for *mosaic governance* to work with the heterogeneous array of people, institutions, and spatial practices associated with active citizenship. Mosaic governance aims for a context-sensitive way of urban green infrastructure planning, enhancing relationships between the diversity of landscapes and communities across cities.

<https://www.sciencedirect.com/science/article/pii/S1877343517300088>

Publication in World Development (2017):

Community Forest Management: An Assessment and Explanation of its Performance Through QCA

Bas Arts & Jessica de Koning.

Abstract: Community Forest Management (CFM) - ranging from community-based to co-management regimes - has become an influential approach in the management of forests around the world in the last couple of decades. In response to some of the adverse effects of state forestry and commercial timber production, CFM claims to improve local livelihoods and conserve forests. Many international organizations, donors, NGOs, and governments therefore advocate CFM. However, a vast body of literature reveals that the overall results are mixed. This paper contributes to this literature in two ways. By building upon neo-institutionalism in CFM studies, the paper uses a practice-based approach as a theoretical lens to better understand how and why CFM institutions are successful or not. In

addition, the paper applies a Qualitative Comparative Analysis (QCA) methodology to conduct a systematic cross-case comparison, while allowing for some generalization. By analyzing a decade of CFM research at the Forest and Nature Conservation Policy (FNP) group from Wageningen University in the Netherlands, this paper compares and synthesizes ten CFM cases from Africa, Asia, and Latin America. It concludes that: (1) CFM does indeed present mixed results; (2) CFM performs similarly on social and ecological parameters; (3) overall, community-based organizations are strongly engaged in CFM; (4) such strong engagement though is not sufficient for CFM to perform; and (5) in particular, the presence of a "Community of Practice" that links local people to external forest professionals for mutual learning, based on respect and trust, makes a positive difference in terms of livelihoods and forest conditions.

<https://doi.org/10.1016/j.worlddev.2017.03.014>

A full publication list can be found on

https://library.wur.nl/WebQuery/wurpubs?A140%2Forganisatie%2Fnaam%2Feng=%3DForest%20and%20Nature%20Conservation%20Policy&wg_inf_pre=pluspre&wg_rel=AND&A140/organisatie/naam/eng==Forest%20and%20Nature%20Conservation%20Policy.

EDUCATION

FNP education in 2016-2017

The Forest and Nature Conservation Policy Group participates in a number of courses in different educational programmes such as the BSc programme Forest and Nature Management (BBN), the MSc programme Forest and Nature Conservation (MFN), the Sustainable Development Diplomacy track (SDD) and various PHD courses. Ten courses are coordinated by FNP, and FNP staff teach in five other courses and programs such as Academic Consultancy Training within Wageningen University and guest lectures at other universities.

Four examples of our bachelor courses and master courses are presented below.

Forest Nature Society (FNP-11806)

One of the courses taught in 2016-2017 is Forest Nature Society (FNP-11806) in which 75 first year BSc students received an introduction into the interrelations between the several societal sectors

and forest & nature, empirically and theoretically. Excursions are an essential part of this course, with visits paid to the Hoge Veluwe National Park to understand the role and significance of volunteers in park management (see central picture below), the Ministry of Economic Affairs and the Haagse Bos (picture below right).

Management of Forest and Nature Organizations (FNP-21306)

This BSc course offers a systematic introduction into business management and administration in forest and nature management. Students conduct a real life assignment to develop a realistic business plan for forest and nature based enterprise. In 2016 55 students participated and successfully delivered 12 business plans to the private estate Prattenburg, located 12 km from Wageningen (see picture left). A similar output was realized for the private estate Beekvliet estate near Voorst in 2017.



Communities, Conservation and Development (FNP-31306)

This MSc course provides an overview of community-based use, conservation and management of biological resources, and their significance for rural development. The following issues are covered: the history of the debate between conservation and development and the policy developments regarding community-based conservation, the main institutional characteristics of community-based conservation and interventions for its development, the main controversies regarding community-based conservation in respect to problematic issues such as the relation between (wo)man and nature, and concepts such as community, indigenous knowledge and practice, and participation and collective action. The course consists of lectures and a group report.

Academic Consultancy Training (YMC-60809)

FNP staff are strongly involved in Academic Consultancy Training (ACT). As part of the ACT course, teams of 5 to 7 students are assigned to

execute an inter-disciplinary driven consultancy project for an external commissioner (for example governmental, private and civil society organizations). Each team has an assigned process coach and an academic advisor relevant to the project. The multidisciplinary and preferably international team will carry out a design type project for their commissioner. Crucial is that teams reach an interdisciplinary synthesis of the compiled information and translate this into an advice on future actions for their commissioner. Examples of ACT's in which FNP participated are: Nuts for the future; Perspectives for hazelnut and walnut production in the Netherlands (2016) and LED it be, innovative; Perspectives of LEDs in horticulture (2017).

FNP is usually involved in 3-5 ACT projects yearly, however in 2016 10 projects were supervised by a content and/or process coach from FNP (see pictures below of student teams supervised by FNP and their external commissioners).



MSc theses

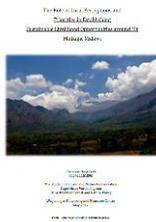
In 2016-2107 FNP (co)supervised 46 MSc theses (FNP-80436) which were successfully defended. A small selection of the wide variety of themes and study locations themes which the FNP master theses tackled are presented below.

- **Folkert Volbeda (2016). Governors and Governed; An in-depth study about the meaning and practice of governance in Dutch river management in the Ooijpolder and Overdiepse polder** (<https://edepot.wur.nl/371414>) supervised by Jelle Behagel.
- **Donna Stolwijk (2016). A palliative against deforestation: An ethnographic evaluation of the effects of Payments for Environmental Services in Marqués de Comillas, Mexico** (<https://edepot.wur.nl/401345>) supervised by Ester Turnhout and Gerard Verschoor (Sociology and Development of Change Group).
- **Nick Warmelink (2016). Analysing Dutch Floodplain Management Practices: A Practice Based Approach** (<https://edepot.wur.nl/396273>) supervised by Jelle Behagel.
- **Kars Meijboom (2017). Investigating the efficiency of a Dutch wood supply chain in terms of push and pull** (<https://edepot.wur.nl/427094>) supervised by Marjanke Hoogstra.
- **Lorenz Blume (2017). Low-carbon cities in Thailand** supervised by Bas Arts and Mattijs Smit (Environmental Policy Group).
- **Maximilian Graefen (2017). Village based hunting behaviour in DR Congo** supervised by Verina Ingram.
- **Linda-Marie Kohser (2017). Investigating hunters' beliefs towards lynx and lynx management in the Harz Mountains using Q methodology** (<https://edepot.wur.nl/424100>) supervised by Koen Arts and Arjen Buijs.
- **Anouk Schouten-van der Laan (2017). Children and nature: differences in children's connection to nature and environmental stewardship when experiencing wild or domesticated nature** supervised by Birgit Elands and Anne Remmerswaal (Education and Competences Studies Group).

BSc theses and Internships

Additionally 24 BSc theses (PEN-80812) and 50 academic internships (FNP-70424) that were finalized in 2016-2017 were supervised by FNP staff.

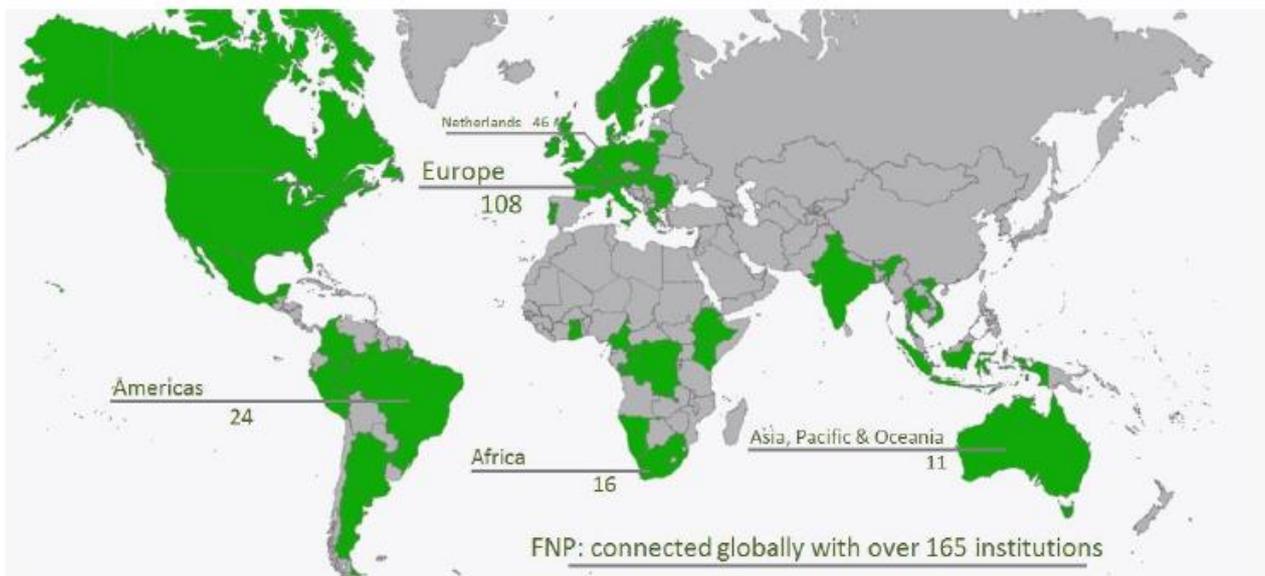
# of FNP (co-)supervised theses and internships	2016	2017	Total
BSc theses	13	11	24
MSc theses	27	19	46
Academic internships	24	26	50



Societal outreach 2016-2017

FNP staff have built up a broad network around the globe, an impression of which is visualized on the map below, showing the locations of FNP's

cooperation with partners around the world in green.



Geographical representation of FNP's institutional network

Detailed information on our collaborations is shown in the personal staff pages on the FNP website, with some highlights including:

- **Bas Arts (professor and chairholder)** occupies a position as a Board Member of the Sustainability Challenge Foundation, an NGO that advocates sustainable development. As a member of the Advisory Group Knowledge Agenda Oostvaardersplassen, the Netherlands State Forest Service was advised on how to set up its new research agenda.
- **Koen Arts (lecturer; assistant professor in 2018)** has been active in a project taking place in the Brazilian Pantanal as a case study of a socio-ecological system faced with numerous threats, including agricultural intensification, urban growth, and hydro-power schemes that affect the water cycle of the system. His work aimed at developing new political ecology perspectives on digital applications in natural resource conservation. This has been done through collaboration with stakeholders in exploring what technological innovation may offer for the understanding, management and governance of the Pantanal and beyond.
- **Jelle Behagel (assistant professor)** is supervising various PhD projects, mainly in Brazil, and in the framework of Sustainable Development Diplomacy (SDD). Global sustainability challenges - including climate change, forest degradation, and food security - are increasingly being addressed through SDD. Together with PhD candidates he works at incorporating indigenous ecological knowledge, practices and worldviews to participatory land use and resource management planning in Brazil.
- **Arjen Buijs (assistant professor)** has focused on the social impact of his research delivering policy evaluations and advice, workshops and presentations to PBL, the Netherlands Environmental Assessment Agency, State Forest Service, the Netherlands Ministry of Economic Affairs and other policy and society stakeholders. His research engages with topics such as biodiversity protection, management of urban and peri-urban green, wildlife and water management, focusing on the Global North.
- **Birgit Elands (assistant professor)** has been involved in GREEN SURGE, a research project funded by the European Commission Seventh Framework Programme (FP7), focusing on planning and management of biocultural diversity in urban green infrastructure. The GREEN

SURGE project explored how a diversity of natures and a diversity of cultures are interlinked in a range of European Cities with a strong focus on the governance of urban green spaces.

- **Marjanke Hoogstra-Klein (assistant professor)** has been requested to serve as an auditor for the Certification Foundation Subsidy Scheme Nature and Landscape which is assessing the quality of forest and nature management for the provincial landscape organizations and the State Forest Service. Her expertise as a social scientist in forest management and forest economics fits this assessor's role very well.
- **Verina Ingram (assistant professor)** is a member of organizations that deal with policy and practice of governing agroforestry and non-timber forest products value chains in tropical countries. Examples are the ISEAL Alliance, the Finance Alliance for Sustainable Trade, the International Association for the Study of the Commons (IASC), the Western Highlands Conservation Network in Cameroon, the International Tropical Timber Organization.
- **Hens Runhaar (special professor)** focuses on management of biodiversity in agricultural landscapes by researching how farmers and other companies in agri-food chains can be stimulated to minimise negative ecological impacts and maximise their contribution to biodiversity and landscape quality: f.i. how to organise knowledge production for 'nature-inclusive' farming and to build networks.
- **Esther Turnhout (full & personal professor)** is an expert at the UN Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). This is the intergovernmental body which assesses the state of biodiversity and of the ecosystem services it provides to society, in response to requests from decision makers.

Our progress in science and research has been developed substantially by the talents of (young) ambitious scientists and researchers. FNP hosts many of them: FNP (affiliated) PhD candidates during 2016-2017 were: Joana Ameyaw, Fernanda Ayaviri Matuk, Tina Bauer, Leonardo van den Berg, Jan-Willem den Besten, Susan Boonman-Berson, Irene Bouwma, Jilske de Bruin, Kristy Buckley, Lucas Carvalho Gomes, William Cook, Mohammed Degnet, Kristina van Dexter, Lyda Dik, Barbara Fairinelli, Margriet Goris, Eugenie van Heijgen, Katarzyna Kowalczywska-Motyka, Wiebren Kuindersma, Joanna Mattei Faggin, Thomas Mattijsen, Maryia Mandryk, Tabitha Mugo, Tabitha Muriuki, Albertina Ndeinoma, Robert Ochieng, Kwame Oduro, Cora van Oosten, Catharina de Pater, Theo van der Sluis, Cinthia Soto Golcher and Marieke Zon.

Contact with FNP



Koen Arts, Joanna Mattei Faggin, Frank van de Graaf, Theo van der Sluis, Cinthia Soto Golcher, Keen-mun Poon, Jim van Laar, Tabitha Muriuki, Bas Arts, Esther Turnhout, Arjen Buijs, Birgit Elands and Verina Ingram during an FNP field trip in 2017

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