UNIVERSITÄT BERN

Project plan

# Wyss Academy for Nature at the University of Bern

A JOINT INITIATIVE OF THE WYSS FOUNDATION, THE CANTON OF BERN, AND THE UNIVERSITY OF BERN, SWITZERLAND

Canton of Bern

Project plan by Rector Prof. Christian Leumann,
with Prof. Peter Messerli, Prof. Markus Fischer, Prof. Thomas Stocker, Prof. Thomas Breu, and André Nietlisbach

Bern, 13 November 2019

THE WYSS FOUNDATION

Canton of Bern

UNIVERSITÄT BERN

Cover photo: Landscape in Laikipia, Kenya (Peter Messerli)

# Contents

# Abbreviations

| | |
|---|---|
| AAF | Andes Amazon Fund |
| ACCA | Asociación para la Conservación de la Cuenca Amazónica |
| CDE | Centre for Development and Environment |
| CEP | Climate and Environmental Physics |
| CETRAD | Centre for Training and Integrated Research in ASAL Development |
| CGIAR | Consultative Group on International Agricultural Research |
| CIFOR | Center for International Forestry Research |
| FENAMAD | Federación Nativa del Río Madre de Dios y Afluentes |
| FIFG | Federal Act on the Promotion of Research and Innovation |
| IBC | Instituto del Bien Común |
| ICRAF | World Agroforestry Centre |
| ICT | Information and communication technologies |
| IIAP | Instituto de Investigación de la Amazonía Peruana |
| IPCC | Intergovernmental Panel on Climate Change |
| IPBES | Intergovernmental Platform on Biodiversity and Ecosystem Services |
| IPS | Institute of Plant Sciences |
| MAAP | Monitoring of the Andean Amazon Project |
| NGO | Non-governmental organization |
| NTFP | Non-Timber Forest Products |
| OCCR | Oeschger Centre for Climate Change Research |
| SDC | Swiss Agency for Development and Cooperation |
| SPDA | Sociedad Peruana de Derecho Ambiental |

# Executive Summary

In recent decades, rapid societal developments have accelerated large-scale biodiversity loss, irreversible land use change, land degradation, and climate change. The immediate need for enhanced nature conservation is widely acknowledged. However, halting and reversing habitat loss and degradation without causing conflict or depriving local communities of their rights and livelihood base, remains a major challenge. The lack of an integrated perspective on current and future interactions between biodiversity, land use, climate, and human development has fundamentally hampered global stewardship of nature and people. Moreover, deep uncertainties related to environmental tipping points and conflicts arising from growing environmental, economic, and political inequalities remain the known unknowns in making conservation sustainable.

Over the next ten years, the Wyss Academy for Nature at the University of Bern will significantly and concretely enhance the conservation and protection of nature. The Academy's mission is to develop, test, and scale up innovative pathways that strengthen and harmonize nature conservation, human well-being, and natural resource use in different landscapes around the world. Based on the University of Bern's world-renowned expertise in biodiversity, land use, and climate change, the Wyss Academy will create innovation by breaking up the conventional silos of scientific research, conservation and development practice, and political routine. World-leading scholars will co-produce solution-oriented applications, strategies, and policies with stakeholders from society, conservation, policy, and business from local to global levels.

The Wyss Academy's strategy is designed to overcome the prevailing disconnect between knowledge and action and between locally adapted solutions and game-changing dynamics and mechanisms at global scales. The Wyss Academy will work through four closely interacting operational units:

- Regional Stewardship Hubs – in Latin America, East Africa, Southeast Asia, and Switzerland – will constitute the cornerstones for developing, testing, and applying innovations for the protection of nature and its sustainable use.

- Transformational Research Teams will provide new knowledge on how to harness opportunities emerging at the interfaces between biodiversity protection, sustainable land use, and climate change mitigation, as well as expertise on business, technology, and governance as key levers of change.

- The Synthesis Center will offer an interface for accessing and synthesizing the latest globally available knowledge on nature protection, for ensuring systematic knowledge integration across the Wyss Academy's different regions and operational units, and for sharing local discoveries at regional and global levels.

- Engagement Platforms at each hub and at the international level will institutionalize a continuous dialogue with multiple actors to secure sociopolitical support for change and share insights with wider networks.

The University of Bern will establish the Wyss Academy as an independent foundation. It will be governed by a Board representing the main funders and supported by a high-level Advisory Committee. Funding totaling CHF 200 million over a period of 10 years will provide the critical mass required to initiate and sustain change in the Wyss Academy's partner regions and to innovate global conservation policy and practice. After kick-off in 2020, the work and business plan envisages a start-up phase of two years to reach full operations by 2022. With its long-term perspective, the Wyss Academy will be highly committed to expanding and diversifying its funding sources to secure operations as a center of excellence in sustainable conservation far beyond 2030.

# 1 Introduction

## 1.1 Vision

We envision that the protection of nature will be significantly enhanced over the next ten years. The Wyss Academy for Nature at the University of Bern will lead a major initiative to shape sustainable futures for nature and people by strengthening and harmonizing nature conservation, human well-being, and natural resource use in different landscapes around the world. Focusing on interactions between people, land, biodiversity, and climate change, the Wyss Academy will produce pathbreaking knowledge for transformation and capacity development, actively build partnerships between science, policy, civil society, and the private sector, and generate concrete solutions from local to global levels.

## 1.2 Mission

Our mission is to develop, test, and scale up innovative pathways that strengthen and harmonize nature conservation, human well-being, and natural resource use. The Wyss Academy creates innovation with concrete results on the ground by breaking up conventional silos of scientific research, conservation and development practice, and political routines. World-leading research experts co-produce concrete applications, strategies, and policies with multiple stakeholders from society, conservation, policy, and business at local, regional, and global levels.

## 1.3 Background and Rationale

In recent decades, rapid development accelerated large-scale biodiversity loss, irreversible land use change and land degradation, and climate change. The most basic resources for humans and nature – water, land, and climate – are threatened by both global and regional pressures. Human well-being and prosperity is a prerequisite for successful and sustainable nature conservation. This demands wise, inclusive, and forward-looking decision-making that recognizes the needs of all living beings and respects the finiteness of resources. A particular challenge today is that decisions must be made in a rapidly changing world. In addition, the irreversibility of environmental impacts, the high degree of uncertainty related to climate tipping points, and conflicts arising from growing environmental, economic, and political inequalities remain the known unknowns of conservation and sustainable development.

Responding to these challenges and promoting development towards sustainability for nature and people is the essence of stewardship. *The lack of an integrated perspective on global changes in biodiversity, land use, and climate has fundamentally hampered global stewardship of nature and people.* It is true that the threats in each individual realm have been recognized; this is reflected in the three UN conventions created at the Rio Earth Summit in 1992 and their more recent visions and specific targets, such as the 2050 Vision for Biodiversity or the Paris Agreement. But only very recently has it been realized just how complex the interactions between the three realms are, and what critical consequences they may have for sustainability.

Global multilateral agreements are important, but not sufficient: On the one hand, humanity is facing a rapidly closing window of opportunity to solve these interconnected challenges. We must urgently move from political declarations to concrete actions. On the other hand, human–environment issues like sustainable conservation are so-called "wicked problems": Translation of evidence into decision-making is not entirely straightforward in these cases. All factors are both cause and effect, and there are many competing players and interests. New approaches to bringing well-grounded, integrated evidence into decision-making are thus needed.

Concrete pathways towards sustainable development and conservation must be designed at the local and regional levels corresponding to specific social and geographical contexts. They result from engaged col-

laborations between science, society, and policy that are rooted in local communities and translate into regions. The Wyss Academy will lift its discoveries from there to the global level and thereby assist in establishing global-scale sustainability and conservation efforts. It cannot be stressed enough that while many adopted the rhetoric of interdisciplinarity and transformative science, few actually pursue it – not least because traditional funding schemes tend to avoid the risks associated with it. Partnering with the Wyss Foundation thus offers a unique opportunity to engage in truly pioneering collaborations.

## 1.4 The University of Bern: A Unique Asset for the Wyss Academy

The University of Bern has a long tradition of research, education, and outreach in the conservation of flora and fauna, in people–land relations in vulnerable regions, and in climate science. In addition to research in nature conservation, more than 30 years of studying land use as the interface between natural and socio-economic systems has led us to understand land use not only as both a cause and a consequence of global change, but also as a solution to increasingly interconnected challenges. Moreover, already in the mid-1970s, our colleagues warned about the consequences of man-made greenhouse gas emissions and their effect on the planet. Fundamental results that have become cornerstones in today's understanding of climate change, such as the quantification of the significant increase in $CO_2$ and $CH_4$ concentrations since the beginning of industrial use of coal and oil, or projections of future climate change based on model simulations, were produced by the University of Bern.

For the past 30 years we have shared our insights with the wider public and contributed to some of the key documents enabling transformation, such as the UN Convention on Biological Diversity, the UN Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement, and the 2030 Agenda for Sustainable Development. Colleagues of the University of Bern have held leading positions in the five assessment cycles of the Intergovernmental Panel on Climate Change (IPCC) since 1988. Since the formation of the Intergovernmental Platform of Biodiversity and Ecosystem Services (IPBES), colleagues have helped to prepare its assessment reports, which provide the scientific basis for policymakers at national and international levels to develop sound strategies and take informed decisions. And last but not least, CDE's director co-chairs the group of scientific experts currently drafting the UN Global Sustainable Development Report which is slated for release at the UN General Assembly in September 2019.

Over the past 20 years, the University of Bern has continually strengthened the basis that has enabled these contributions; first by establishing the leading houses of two Swiss "national centres of competence in research" – large national research programs – and subsequently by founding the Oeschger Centre for Climate Change Research and the Centre for Development and Environment, which emerged from those programs to become permanent structures of the University. In the Swiss National Science Foundation's current call, a new national centre of competence in research on biodiversity, led by us, is in the final round of selection.

The combination of world-renowned science and education in the three intersecting fields of climate change, land use and development, and biodiversity and conservation is unique. It provides an excellent basis for generating knowledge and building capacity aimed at safeguarding resources, protecting the climate, and guaranteeing the long-term viability of conservation efforts. First-class research comes with access to the latest findings; and our long-standing experience working with people, companies, and policymakers in vulnerable regions of the world, like the savannah and mountain landscapes of Kenya and Tanzania or forest frontier contexts in Peru, Bolivia, Madagascar, Laos, and Myanmar, has equipped us with a large network of experts, stakeholders, and colleagues in communities, local organizations, and educational institutions, enabling and ensuring equitable and emancipated working relationships.

| | Climate Change | Land Use Sustainability | Biodiversity and Ecosystems |
|---|---|---|---|
| Global science–policy dialogue | ipcc INTERGOVERNMENTAL PANEL ON climate change | THE GLOBAL GOALS For Sustainable Development | ipbes Science and Policy for People and Nature |
| Leading global research programs | PAGES | Global LAND Programme | GLOBAL MOUNTAIN BIODIVERSITY ASSESSMENT |
| University of Bern | Oeschger Centre for Climate Change Research (OCCR) | Centre for Development and Environment (CDE) | Institute of Plant Sciences (IPS) |

**Table 1:** Overview of the University of Bern's activities in the three relevant fields – climate change, land use and sustainability, and biodiversity and ecosystems. The University of Bern runs institutionalized activities in basic research, global research coordination, and global science–policy dialogue in all three fields. These activities and a large number of engaged researchers will be a unique asset for the Wyss Academy.

## 1.5 Proof of Concept

Hansjörg Wyss has invited the University of Bern to present a proof of concept through a pilot project funded by the Wyss Foundation. The outputs and insights of this one-year pilot project, which started in summer 2018, have fully fed into this proposal. This includes the following four building blocks:

**Establishment of a knowledge base in Kenya and Peru**
During the proof-of-concept phase, we built up a knowledge base focusing on current conservation and development challenges and opportunities. Building on previous work of the University of Bern and its regional partners in Kenya and Peru, we developed analytical products like maps and statistics and integrated them in the existing information repositories of the regional partners (CETRAD, Kenya, and ACCA, Peru). The products show spatial and temporal dynamics of biodiversity and ecosystem services, climate change, land use change, and socio-economic developments. Key insights are presented in Section 2.2.1 of this proposal.

**Development of the incubator scheme**
A key feature of the Wyss Academy is the incubator scheme for exploring innovative solutions for nature and people. Through reconnaissance missions with our main partners, we were able to build a shared understanding of the main development challenges and opportunities. Drawing on the analytical knowledge and on thorough mapping of relevant actors, co-design workshops were held in early 2019 in Lima (Peru) and Isiolo (Kenya). In each of the two three-day events, more than 40 stakeholders from civil-society organizations, research, policy, and the private sector developed concrete ideas for the protection of nature and its sustainable use by people (see reports in Annex A and B, in separate PDF). These ideas were then distilled into a shortlist of most promising projects, from which we selected two incubator projects each that are currently being implemented in Kenya and Peru (see Section 2.2.1). All co-design processes revealed an enormous interest among stakeholders to engage in this new incubator scheme and build new partnerships for change through the regional hubs (see Figure 1).

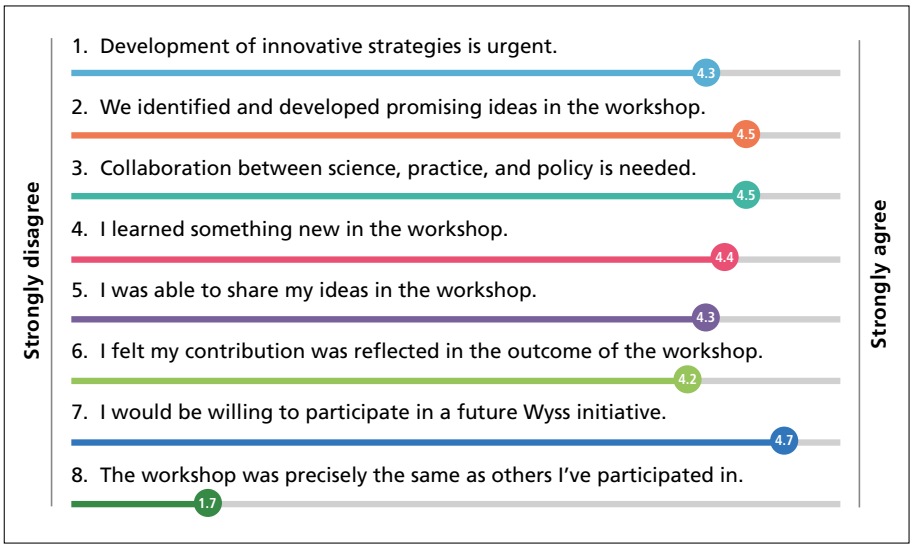


**Figure 1:** Evaluation of Kenya Co-Design workshop by 43 participants representing conservation, science, business and policy. Eight evaluation questions were rated from 0 (strongly disagree) to 5 ( strongly agree).

### Co-funding by the Canton of Bern and the University of Bern

The task of securing co-funding for the Wyss Academy in the amount of CHF 100 million was taken up in equal terms by the University of Bern and the Canton of Bern. The development of a regional stewardship hub in the Canton of Bern was essential to gaining support for such a bold idea in such a short time. In close cooperation with different departments of the cantonal administration, we developed an operational structure and a list of 14 incubator projects (see Section 3.3). A detailed report prepared the way for the Cantonal Parliament's approval of the co-funding credit. This report presents the planned Bern Hub's thematic orientation including possible incubator projects, as well as its financial architecture and governance arrangements (the full German version of the report is available upon request). On that basis, the Cantonal Government prepared a decision for the Cantonal Parliament. This decision was approved with an overwhelming majority of 120 votes in favor, 22 against, and 6 abstentions on March 7, 2019. The Wyss Academy received clear support across all political parties and from parliamentarians representing both urban and rural areas. As no referendum was sought within the following three months, the decision of the Cantonal Parliament to co-fund the Wyss Academy with a total amount of CHF 50 million became legally binding as of July 2019.

### Institutional structure and embedment of the Wyss Academy for Nature at the University of Bern

The Wyss Academy's success depends on adequate institutional and financial arrangements. The University and the Canton of Bern developed a detailed institutional concept of the Wyss Academy with assistance from a specialized office. The Wyss Academy's organizational setup, business plan, and legal form were identified based on a comprehensive assessment and benchmarking (e.g. Wyss Zurich). This also involved clarification of the Wyss Academy's relation to the University's existing centers (the full 60-page report in German is available upon request). At the level of the Regional Stewardship Hubs, we designed suitable institutional arrangements and made basic agreements with the main partners of the Wyss Foundation and the University of Bern.

# 2 Approach and Activities

## 2.1 Overall Strategy and Approach

In line with its vision, the overall goal of the Wyss Academy is to significantly enhance nature protection by harmonizing nature conservation, human well-being, and natural resource use. In view of this overall goal and the mission to devise innovative pathways to sustainable futures for nature and people, two aims will guide the Wyss Academy's strategy (see Figure 2):

a) To overcome the prevailing disconnect between knowledge and action by devising innovative collaborations between researchers, policymakers, practitioners, and the private sector to produce and implement transformation knowledge; and

b) To bridge local and global contexts in order to create locally adapted innovations that are robust in the face of global environmental, economic, and social dynamics and to lift context-specific discoveries to global policy levels.

These two aims represent the unique value proposition of the Wyss Academy. To our knowledge, no other initiative worldwide has successfully addressed both challenges at once. The two intersecting aims will be addressed by four operational units (represented by the four quadrants in Figure 2). Their synergetic interplay is key to the Wyss Academy strategy: We believe that each unit is needed and their combination is sufficient to solve the challenges we face. The four units are briefly outlined below. A more detailed description is provided in the subsequent sections.

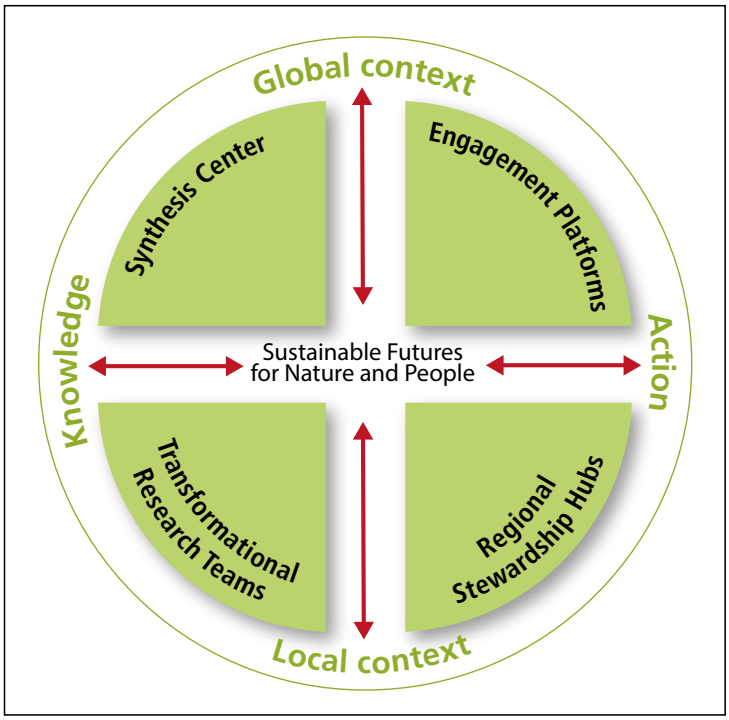


**Figure 2:** Overview of the Wyss Academy's main operational units and their contributions to bridging knowledge with action and locally adapted solutions with game-changing dynamics and mechanisms at global scales.

**Regional Stewardship Hubs**

The Regional Stewardship Hubs constitute the cornerstones for developing, testing, and validating solutions to the interconnected biodiversity–land–climate challenges in hotspot landscapes across the globe. At each hub, the Wyss Academy will engage in experimental collaborations involving researchers, communities, and stakeholders in local contexts. Capacity development will be an important part of these collaborations. At the same time, the Wyss Academy will establish regionally anchored knowledge platforms.

**Transformational Research Teams**
Building on the firm ground of scientific excellence, up to six Transformational Research Teams will provide knowledge, expertise, and competence for all other units. They will strive for new insights exploring not only systemic opportunities between land, biodiversity, and climate, but also the potentials of business, technology, and governance as key levers of change. The teams will be involved in the Regional Stewardship Hubs' activities by contributing to decentralized knowledge platforms and participating in experimental collaborations. At the same time, their grassroots involvement will shape their future research agendas and contribute important insights.

**Synthesis Center**
The Synthesis Center is essential in fast-tracking acquisition and processing of the latest knowledge for the Wyss Academy's purpose. It will allow the research teams and Regional Stewardship Hubs to mobilize additional world-leading experts to synthesize available knowledge in dedicated temporary working groups. Moreover, its experts will conduct comparative assessments of promising solutions and lessons learned across the Regional Stewardship Hubs and synthesize insights for the global policy and research arena.

**Engagement Platforms**
These platforms, established at each hub as well as at the Wyss Academy headquarters, will engage a network of stakeholders in continuous dialogue, exchange, and action. On the one hand, they will inform the Regional Stewardship Hubs on pressing issues and knowledge gaps to be addressed. On the other hand, they will serve to share and validate insights gained from innovative collaborations with a wider regional network and to scale up recommendations to national and global policy levels.

## 2.2 Operational Units

### 2.2.1 Regional Stewardship Hubs: Beacons of Transformation

Transformations to sustainability for nature and people, according to the Wyss Academy's vision and mission, are context-specific. Accordingly, the Wyss Academy will engage directly with civil society, policymakers, and the private sector in four regions: East Africa, Latin America, Southeast Asia, and the Canton of Bern in Switzerland.

The Regional Stewardship Hubs will serve as platforms for research and knowledge on transformations to sustainability for nature and people. They play a key role in co-designing and implementing incubator projects to test and validate sustainability pathways, as well as in facilitating stakeholder dialogue, synthesizing patchy information and knowledge on regional development issues, and providing services and advice on best practices for partners from policy and practice. Service delivery will be enhanced by institutionalized cooperation and exchange among the Regional Stewardship Hubs and by close collaboration with the other Wyss Academy units: the University of Bern-based team members, the Transformational Research Teams, the Synthesis Center, and the international Engagement Platform.

Each hub will encompass three basic components:

- A **knowledge platform** to support transformations and strategic foresight
  The knowledge platforms will compile and make available and accessible promising innovations for conservation, resource management, and people (e.g. approaches, technologies, policies). Working with local partners, they will use cutting-edge methods to produce data and information of excellent quality. These will feed into strategic foresight and an early warning system based on combined monitoring of societal and economic trends (e.g. demography, employment opportunities, food security, health) and environmental indicators (e.g. biodiversity, drought, biomass productivity, land degradation). The knowledge platforms will benefit from the hubs' networks of local researchers from various fields and disciplines as well as from a close involvement of the Transformational Research Teams of the University of Bern.

- An **incubator scheme** for innovative solutions
  The incubator scheme is an innovative form of collaboration where promising approaches and innovations are jointly designed, tested, and adapted to the given realities with a view to subsequent upscaling. This demand-oriented scheme bridges research and practice, is knowledge-based, and encourages experimental approaches. These range from regulatory and institutional changes to technology-oriented inputs. An innovation and partnership fund will be established to finance a number of incubator projects annually in each of the hubs. Projects will have a life span of up to three years. The identification process will be managed by the hub directors and their teams, with the final selection made by the Wyss Academy Director (see Section 3.2). Projects will be selected based on clear criteria ensuring innovative potential, feasibility, fruitful partnerships, and scalability.

- An **Engagement Platform** for building alliances
  To enhance the Wyss Academy's transformative potential, each hub will build up a broad network of partners from research, civil society, government, and the private sector. Exchange among its members will be facilitated through an Engagement Platform comprising both virtual and face-to-face elements. These Engagement Platforms will serve to identify current and emerging conservation and development challenges, to build multi-stakeholder alliances for concrete actions, and to discuss policy options. The hubs will support continuous dialogues, conduct targeted social media campaigns, produce tailor-made products for policy and practice, and engage in relevant debates via so-called "Wyss Ambassadors" and by forging partnerships with influential institutions. Decentralized training and education efforts at all levels of society will also form part of engagement.

## East Africa Hub

### Development challenges

The region of northern Kenya spans an impressive ecological gradient stretching from forested and humid Mount Kenya across the Laikipia plateau to the dry Samburu plains. Land use and economic activities changed profoundly in three phases. After 1912, parts of the predominantly pastoral areas were transformed into "white highlands" with large ranches and a comparatively small population of 30,000 inhabitants. After independence in 1964, these lands were partially transformed into a smallholder settlement area with a high population density. Today, these areas at the foot of Mount Kenya are home to 500,000 inhabitants, and population continues to grow due to immigration of families from other parts of Kenya. As a consequence, water demand has significantly increased, thus compromising the natural resource base of pastoralists, wildlife, and agriculture in the dry lowlands. Conflicts are becoming more frequent and are often violent. Further risk of conflict arises from competing resource demands from mega-infrastructure projects, urbanization, and export-oriented horticulture in the context of climate change. Our high-resolution regional climate models show a trend towards increased rainfall, but it comes with higher variability, which manifests itself in more pronounced dry spells. This increases pressure on pastoral communities and may have serious consequences for wildlife in conservancies. Taken together, these developments have led to land fragmentation limiting pastoral and wildlife movements, widespread degradation of land and water (especially on grasslands), and loss of biodiversity, which is reflected in a decrease in wildlife by 70% over the last 30 years.

### Transformative actions

In the co-design workshop in Isiolo, more than 40 participants worked together to formulate more than 100 ideas for transformative actions to reconcile nature conservation and people's needs. These were prioritized in a participatory process, resulting in a shortlist of six potential incubator projects. This initial set of incubator projects (see Annex C, in separate PDF) responds to the needs and demands of local communities, conservancies, civil society, and policymakers. Prioritized interventions range widely and include wildlife conservation, traditional and modernized practices for land restoration, collaborative value chain development for market integration, technology adoption, and educational efforts. In addition, two incubator projects (CorriDOOR and Spring Stewardship) were proposed for immediate implementation (see Box 1 and Annex C); they were launched shortly after and are currently ongoing. The other six are being further developed for implementation at a later stage.

**CorriDOOR: Mapping, labelling, and maintenance of livestock and wildlife routes**

So far, the concept of corridors was only applied to support wildlife movement, because conservation and pastoralist land use were perceived as incompatible. However, both occupy the same space and are affected by resource scarcity and increasing land fragmentation. Joint efforts between these groups can thus improve the situation for both nature and people: With adequate planning and monitoring, livestock/human and wildlife corridors can be combined for the benefit of both groups.

**Incubator ideas for further elaboration**

a. Mobile landscape restoration lab
b. Collaborative value chain development
c. Ancient innovations in water, grazing, and forest
d. Conservancies for peace
e. Transformative research on technology adoption
f. Building perspectives through vocational training

**Box 1:** Incubator ideas for East Africa

### Assets and setup

It is proposed that the East Africa Hub will be located in Nanyuki, with a small side office in Nairobi, and will be merged with CETRAD (Centre for Training and Integrated Research in Arid and Semi-Arid Lands Development). For over 40 years, CDE and its institutional partner CETRAD have jointly engaged in application-oriented research and outreach activities. As a result, the University of Bern and its partner institution CETRAD are widely regarded as leading experts in natural resource management, conservation, and resource governance. Over time, they have established a comprehensive knowledge base (see online repositories of the Socio-Economic Atlas of Kenya or the Social and Hydrological Information Platform) and a broad network of cooperation partners in the region. Building on these assets, the participants of the co-design workshop expressed their wish and willingness to pool and continuously update knowledge relevant to nature conservation, as well as to complement and strengthen this knowledge base by integrating additional perspectives and scientific insights. Further, they called for setting up an institutionalized platform for dialogue and joint actions among the major stakeholders. This regional Engagement Platforms would bring together a network of representatives from conservancies and community development (e.g. The Nature Conservancy, Northern Rangeland Trust, Lewa Conservancy), local communities (e.g. water users associations, pastoralist and smallholder associations), research organizations (e.g. Mpala Research Centre, CETRAD, Kenya Forestry Research Institute), policy (e.g. national and county water authorities), and private actors (e.g. ecotourism entrepreneurs, agri-businesses).

## Latin America Hub

### Development challenges

Madre de Dios is part of the Tropical Andes biodiversity hotspot: It contains one of the world's highest levels of species endemism and diversity (e.g., more than 1,000 bird species have been recorded in Manu National Park) and still hosts important areas of old-growth rainforest (e.g., protected areas cover 44.6% of the territory). However, the region also has one of the highest deforestation rates in Peru, reaching almost 23,700 ha in 2017. Direct drivers of deforestation, biodiversity loss, and degradation of natural ecosystems are land use changes related to illegal gold mining, small- to medium-scale agriculture, and, to a lesser extent, illegal logging. These unsustainable practices are fueled by largely un-controlled immigration, mainly from the resource-poor neighboring Andean highlands. Other indirect drivers of deforestation are related to the weak governmental institutions and their lack of enforcement capacity, in some cases overlapping land rights, as well as high levels of corruption. Areas exposed to highest pressure are located along the interoceanic highway. Illegal gold mining is a serious issue in the region that leads not only to deforestation but also to mercury contamination and social problems. The degradation of forests and other natural ecosystems has direct negative impacts on their benefits for local populations, particularly for indigenous communities. Depending on the scenario, climate change will raise the temperature by 1 to 5°C, which in turn will cause more frequent and intense droughts and fires, as well as more frequent torrential rainfalls. These effects of climate change exacerbate the impacts of other drivers and affect ecosystems and related economic activities.

### Transformative actions

The co-design workshop showed that Madre de Dios has been home to many innovative initiatives that link people with biodiversity, climate change, and land management. The combination of highly diverse social-ecological systems, with complex dynamics and an enabling socio-political environment (i.e. civil society, current authorities, tourism) make it a great potential learning laboratory for developing, testing, and validating such initiatives. In the co-design workshop, from an initial 182 ideas, the

40 participants prioritized 6 potential incubator projects (see Annex D, in separate PDF) for further development (see Box 2). Two additional incubator projects are already being implemented (Biodiversity Monitoring and Resilient Buffer Zones).

**Resilient buffer zones**

Buffer zones of protected areas are an opportunity for testing innovative conservation models that create the co-benefits that local populations need in order to reduce pressure on natural resources. The project will work with local authorities and farmers to develop and test an integrated management strategy for the buffer zone of Tambopata Natural Reserve that can subsequently be scaled out to other protected areas and up to larger areas (e.g. micro-watersheds). The strategy will involve sustainable economic activities, forest management technologies, and legal support to prevent invasions.

**Incubator ideas for further elaboration**

a. Brazil nut conservation agreements
b. Non-Timber Forest Product value chain development
c. Forest video streaming sponsorship scheme
d. Indigenous knowledge for conservation
e. Policy coherence for territorial management
f. Higher education for sustainable conservation

**Box 2:** Incubator ideas for the Andes Amazon

### Assets and setup

After consultation with partners, we propose that the Andes Amazon Hub will be based in Lima, with a side office hosted by ACCA in Madre de Dios. Activities will first focus on Madre de Dios department and then expand to other areas of the Andes Amazon in Peru and Bolivia. The hub can build on major assets in the region: CDE's long-term engagement in Peru and Bolivia related to natural resource governance, AAF and ACCA's long-term expertise in Madre de Dios and beyond in the Andes Amazon, the existence of important data (e.g. deforestation data from the MAAP project, biodiversity studies carried out by ACCA, etc.), and a strong partner network. Potential partners include actors from research (national universities in Madre de Dios and in Lima, IIAP, CGIAR centers such as ICRAF and CIFOR), civil society (AAF's implementing NGOs including ACCA, IBC, SPDA, etc.), community-based organizations (FENAMAD – the indigenous federation of Madre de Dios, farmer organizations, Brazil nut and other processors, etc.), the private sector (local and national ecotourism entrepreneurs, sustainable logging companies, etc.), and local authorities (newly elected governor of Madre de Dios and other allies among national, provincial, and district authorities).

## Southeast Asia Hub

### Development challenges

Mainland Southeast Asia, and especially Laos and Myanmar, are biodiversity hotspots of global relevance. They are home to many endangered species, pristine forests, untouched rivers, and an exceptionally rich agrobiodiversity. Both Laos and Myanmar were isolated from the international community for decades. The recent economic and political opening up of the two countries has accelerated economic growth, which relies primarily on the extraction of natural resources. Weak governance, poor law enforcement, uneven power relationships, and extremely rapid social transformations are posing tremendous challenges for protecting the environment and the rights of local communities. Local livelihood systems are increasingly undermined by the loss of biodiversity and eroding capacities of degrading landscapes for providing multifunctional services. Laos and Myanmar are at a tipping point; solutions for conservation and communities must be found before the point of no return is reached. However, global blueprint conservation models have often faced strong opposition from local communities in this region and failed to generate the expected outcomes and transformations.

### Transformative actions

Unlike in Kenya and Peru, no co-design process was planned in Southeast Asia during this pilot phase. Ideas presented below represent a first set of possible approaches and strategies that build on our long-term engagement in the Mekong region.

The vision is to reverse trends of landscape homogenization and biodiversity loss and move towards alternative and sustainable development pathways. Means to achieve this vision include valuing biodiversity and agrobiodiversity and materializing their potential for resilient livelihoods and sustainable development. Two main streams of interventions will contribute to the vision's achievement:

(1) *Alternative conservation models* that focus on people–nature interactions will be tested in selected target areas, such as the Nam Phouy protected area in Laos. Public–private partnerships (e.g. with the Elephant Conservation Center or the Gibbons Experience in Laos) will be developed in areas such as ecotourism promotion based on wildlife observation, non-invasive attractions, and volunteering programs. Additionally, innovative ICT-based approaches to valuing biodiversity and local community-based stewardship by distant actors constitute promising levers of change.
(2) *Agrobiodiversity* will be promoted in various ways. These include supporting communities to develop sustainable value webs for local high-value products; developing Knowledge Platforms for agrobiodiversity-based livelihoods; connecting regional champions to establish a community of landscape stewards, starting in Laos and Myanmar and expanding to the wider region; engaging with the private sector in the use of ICT (e.g. blockchain) as a potential enabler of the above.

### Assets and setup

Based on the University of Bern's partnerships in Laos, some of which date back 25 years, we propose to set up the Southeast Asia Hub in Vientiane. However, the Hub will take a region-wide perspective, allowing it to support promising activities in other parts of Southeast Asia as well. Given the importance and urgency of halting biodiversity loss and the emergence of opportunities for action in Myanmar, we envisage establishing a branch office there. The University of Bern is a reputed knowledge broker between science, policy, and society in Laos and Myanmar, where its offices are running large programs on natural resource management and governance. Thanks to a large and diverse portfolio, we can count on a very broad and lively network of partners, including local civil-society groups, international NGOs, development agencies, research institutions, and governmental entities.

## Bern Hub

Switzerland, especially in its rural areas, faces many challenges that compromise its diverse natural and cultural landscapes. Challenges include biodiversity decline, structural adjustments in agriculture and agricultural practice, increased mobility for work and leisure, population growth and aging, increased spatial needs and conflicts, and demand for ecosystem services. All these developments have an impact on nature and people in Swiss cultural landscapes.

New approaches and technologies for conservation, natural resource use, and for shaping landscapes are urgently needed. The incubator projects implemented by the Bern Hub, and their close collaboration with other Wyss Academy units, will provide new perspectives and solutions that could not be developed otherwise.

Different ministries and offices of the Canton of Bern, in cooperation with the University of Bern, developed a preliminary Wyss Academy project portfolio for the Bern Hub (see Annex E, in seperate PDF). The proposed incubator projects respond to challenges in landscape conservation and sustainable resource use by creating novel collaborations between research and practice and across sectoral boundaries.

**Implementing ecological infrastructure**

In line with the Swiss Biodiversity Strategy, this incubator project aims to preserve and restore biodiversity and ecosystem services in the long term. To contribute to this goal, the project will strive for the establishment of an adequate ecological infrastructure. A network of protected areas, further habitats, and network corridors (e.g. wildlife bridges) will be established in the Canton of Bern as a test run for later upscaling.

The project will define spatial planning for protected areas and corridors while exploring alternative benefit-sharing mechanisms for affected actor groups, such as landowners. A spatial representation of the ecological infrastructure will serve for negotiations between relevant actor groups, including the Canton of Bern, towards realization on the ground.

**Selected incubator ideas for further elaboration**

a. Efficient use of biomass potential for energy production
b. Making the Jungfrau (Oberland Ost) tourism region $CO_2$-neutral
c. More efficient and effective promotion of upland moor regeneration
d. Innovative and preventive forest fire management
e. Ranger stations for sustainability in Bernese Nature Parks
f. Regional added value from forests and wood
g. Sustainable management of water and soil in the area of Lakes Biel, Murten, and Neuchâtel

**Box 3:** Incubator ideas for the Canton of Bern

The project portfolio currently consists of 14 incubator ideas. Box 3 describes one example and lists seven more. These projects will be further specified after the Wyss Academy is endorsed by all funding partners. More projects will be developed during and after the Wyss Academy's start-up phase. The Parliament and the Government of the Canton of Bern have made available a total volume of CHF 30 million in cash over the next ten years for implementation of the incubator scheme at the Bern Hub.

### 2.2.2 Transformational Research Teams

Transformational Research Teams represent the second key element of the Wyss Academy's strategy alongside the Regional Stewardship Hubs. They are designed as sources and pools of novel knowledge which is critical to achieve the Wyss Academy's vision, but, at the same time, is missing or incomplete. The teams will build on the firm ground of scientific excellence at CDE, IPS, and OCCR, and will generate novel knowledge and competence indispensable for accomplishing the Wyss Academy's mission.

The Wyss Academy will establish up to six Transformational Research Teams. A first set of three teams will work at the interfaces between biodiversity, land, and climate. They will focus on the investigation of trade-offs and co-benefits between nature conservation and sustainable land use, as well as between climate adaptation and mitigation and biodiversity. The teams will explore how vicious cycles and unsustainable practices can be turned into virtuous cycles for nature protection.

A second set of three teams will focus on three enablers of social development towards sustainable nature–people relations: the economy, governance, and technology. The teams will work specifically on the economy of nature's values, on new governance tools and institutional measures, and on innovation through new technologies, communication, and digitization. The new knowledge created by these teams will serve as three distinct but complementary levers for change towards the protection of nature and its sustainable use by local people.

Each research team will be headed by an internationally renowned scholar, who will lead an interdisciplinary team of four to five young international experts from different fields. These teams will collaborate closely with the existing teams at CDE, IPS, and OCCR and will reach out to ensure full use of synergies with further units of the University of Bern.

The teams will contribute to the Regional Stewardship Hubs' activities and actively participate in incubator projects. Furthermore, they will be involved in the Synthesis Center. Finally, the Transformational Research Teams will engage with stakeholders and provide evidence to substantiate contested conservation and development issues. Such knowledge diplomacy will be facilitated by the Wyss Academy's regional and international Engagement Platform.

## Transformational Research Teams working at the interfaces between biodiversity, land, and climate

### Transformation knowledge for sustainable nature conservation

Pressures on wildlife, natural habitats, and protected areas continue to increase in spite of past and current conservation policies and mechanisms. This research team sets out to support and, where necessary, rethink conservation and will experiment with novel conservation approaches. For conservation to become effective, it is necessary to resolve conflicts between conservation and local people, who risk being disadvantaged or even criminalized by ill-conceived policies. The team will adopt a landscape and multi-stakeholder perspective to maximize co-benefits and incentivize local people for the stewardship of biodiversity, land, and climate. It will design, and support the introduction of, institutional innovations such as clear regulations and enforceable rights to allow communities to benefit from conservation. Important questions to be addressed in the hub regions and in general include:

- How can protected areas be designed to benefit both nature and people?
- How can conflicts between conservation and local livelihoods be turned into co-benefits?
- Which innovative institutional arrangements and partnerships can render conservation beneficial for nature and people?

### Landscapes that work

Land use holds the key for addressing the triple challenge of halting biodiversity loss, improving human well-being, as well as mitigating and adapting to climate change. Careful design and planning of land use at the landscape level is crucial, as it provides the basis for optimizing the multiple goods and services provided by different land uses for conservation purposes and for beneficiaries within and beyond the landscape concerned. This transformational research team will use latest technologies to map, model, and monitor land use dynamics from local to regional levels. It will work closely with local people, conservation agents, and multiple stakeholders to identify flows of goods and services, improve the use of land and its design in space and time, and, ultimately, transform trade-offs into co-benefits. The following questions will guide the team's work:

- How can sustainable intensification of land use reconcile biodiversity protection with agricultural production while being climate-smart?
- What landscape designs maximize benefits and minimize conflicts among different stakeholders over goods and services provided by land? How can such landscapes be co-designed, planned, and managed with a view to fair access and benefit-sharing?
- Should land be shared or spared for conservation and natural resource use? What have different conservation approaches achieved? What innovative ways of implementing clear rules in different spaces can improve the efficiency and effectiveness of protected areas?

### Towards climate-change-resilient conservation

Man-made climate change is threatening essential resources of humans and nature with unknown consequences for conservation. This transformational research team will produce scenarios of changes in regional climate and water resources for the next 50 to 100 years and analyze their impact on

biodiversity. Based on the findings, regional planning agencies will promote more resilient conservation areas by fostering more equitable resource use and better management of land for farming and rural livelihoods.

Global climate change affects all key elements of weather – in particular the duration, amount, and extent of rainfall, the occurrence and intensity of extreme weather events, and the state of soil. The team will use climate models to generate scenarios of the future, incorporating land use options provided by the team working on land. High-resolution (down to 1 km) regional climate models for the hub regions will be used to calculate the impact of different socio-economic behaviors on temperature, seasonality, rainfall, water storage, soil status, and extreme weather events. This information will drive region-specific biodiversity models to identify the areas most vulnerable to stress on fauna and flora. Innovatively coupling climate and biodiversity models this team will explore how interactions between climate and biodiversity exacerbate or mitigate negative impacts on humans and ecosystems. The results will be tools that inform and shape long-term strategies for people in the hub regions. The team will address the following questions:

- What weather and seasonal characteristics will conservation areas and people experience in the next 50 to 100 years, and how will this impact water and food security and nature conservation?
- How is biodiversity affected by regional climate change in the hub regions, and what are the consequences for natural resources that humans and nature depend on?
- What resilience strategies for conservation areas and nearby communities enable adaptation to climate change impacts while increasing the level of conservation in the hub regions?

## Transformational Research Teams focusing on concrete levers for transformation

### Governing land with and without governments

Governance for nature and people is about rules: Transforming the ways in which they are set, implemented, and monitored is central to increasing their positive impact on the protection of nature and people. What needs to be done, by whom, and how, depends on the context. The effectiveness and justice of governance schemes also depends significantly on their design and how they manage to address power relationships among different stakeholders (e.g. between governmental policies, private sector initiatives, and civil society). In a more and more globalized world, these interactions increasingly play out across local to global levels and reach distant places. Therefore, effective governance of land for the protection of nature and people can no longer be confined to local territories and their formal governments. Rather, innovations need to connect different centers of governance to stimulate and drive transformation.

Innovative multi-stakeholder platforms, community-based initiatives, and regulations of flows of commodities and investments are currently among the most important initiatives working towards sustainability solutions for nature and people – but with varying levels of success. This team will conduct research on governance innovations and how they play out across places and scales. It will be guided by the following questions:

- What governance innovations – such as multi-stakeholder, community-based, and flow-based governance schemes – work for the protection of nature and people? Why and in what specific contexts?
- What are the most important leverage points in both the focal regions and distantly connected systems for governance innovations to trigger transformative change?
- How can the effectiveness and justice of governance processes in hotspot landscapes be improved?

### The value of nature: Better choices for nature and people

This transformational research team will provide knowledge on reducing economic pressures on nature, on the economic and non-economic valuation of nature by people, and on the behavioral dimensions to be mobilized for changes towards sustainable conservation. Current economic development is at the root of many of the direct pressures on nature. At the same time, behavioral studies indicate that people's choices cannot exclusively be explained in economic terms. This group will identify sustainable ways of economic development that aim at reducing pressures on nature and climate while promoting human well-being. This will involve careful consideration of various ways of valuing nature (including monetary and non-monetary economic valuation, as well as non-economic valuation in terms of social or cultural values and preferences) and ways to consider so far externalized nature-related benefits and costs in national, regional, and international accounting. The team will further add value to understanding people's perceptions of nature and conservation, and contribute to resolving conservation conflicts by adopting cutting-edge methodologies from behavioral sociology. These techniques enable a detailed understanding of people's motives and are thus particularly effective in terms of combining social, technical, and economic innovations. Moreover, the team will provide transformation knowledge on making value chains and value webs more sustainable and on triggering behavioral changes towards sustainable conservation. The team will address the following questions:

- How can economic functions be understood and reframed in terms of incentives and steering mechanisms to reduce pressure on nature and people and support innovative conservation models?
- What are behavioral components of frictions and conflicts between nature and people, and what levers can be mobilized to turn trade-offs into co-benefits?
- What are the qualities of value chains and value webs that push the frontiers of conventional marketization? How can gains be secured for primary producers so as to offer fair conditions and enhance engagement for the protection of nature?

### New technologies and digitization for environmental stewardship

Technological innovation and digitization are major drivers of development. They have great potential to act as enablers or even change agents towards environmental stewardship. Big data, cloud computing, and communication technologies are promising avenues towards enhanced transparency and accountability regarding the consequences of human activities on climate, land, and biodiversity from local to global levels. Combining such technical innovations with social ones opens up new and more efficient ways of monitoring, communicating, and governing our finite resources. Modern technologies like blockchain are believed to have a strong potential for improving the transparency of supply chain management (e.g. farmer to market) or for involving distant stakeholders in compensation schemes for carbon sequestration, biodiversity protection, and environmental stewardship more generally. However, the actual potential of such novel technologies remains greatly under-researched.

This transformational research team will therefore build, broker, and implement digital technologies for enhanced environmental stewardship in the four hub regions. It will be guided by the following questions:

- How can ICT innovations – namely the data revolution with big data, artificial intelligence, cloud computing, and citizen science – be employed for near-real-time monitoring of human–environment dynamics in hotspot landscapes? How can results be made accessible in forms suited to different actors and their needs?
- How can current public ledger technologies like blockchain be employed to increase the transparency, efficiency, and accountability of development interventions in support of environmental stewardship?
- What social innovations need to accompany technical innovations to ensure that ICT becomes a solution rather than a problem?

### 2.2.3 Synthesis Center

The challenges facing sustainable nature conservation and human well-being are driven by more and more globalized and fast-changing processes. Likewise, sustainability transformations require highly dynamic knowledge provision and decision-making that engages thinkers and doers from across the globe in generating options for action on the ground. The Synthesis Center will be dedicated to synthesizing social-ecological knowledge with a focus on opportunities for transformation. It will consist of working groups composed of international experts and visiting fellows, including knowledge holders, decision-makers, and practitioners. Working groups and visiting fellows will be selected from excellent senior and early-career experts from around the world by appropriate review panels.

The working groups and fellows will work towards high-impact products on pressing issues concerning global, regional, or subregional stewardship of interactions between nature and people. Examples of synthesis topics include: nature conservation; impact and management of invasive species; decarbonization; sustainable intensification of food systems; sustainable use of biodiversity; valuation of biodiversity and ecosystem services; ways for governance of social-ecological systems to balance trade-offs and maximize co-benefits between various goals (such as biodiversity targets or Sustainable Development Goals); and good governance of telecoupled systems.

The Synthesis Center will initiate several working groups annually and host new fellows each year. Working groups will typically convene for a kick-off meeting in Bern to agree on a work plan; then work remotely for up to two years, meeting once in the middle of this period and once at the end. Visiting fellows will develop synthesis products within periods of 6 to 12 months. Deliverables of the Synthesis Center will comprise global assessment reports, integrated theoretical and innovative practical options, novel methods such as social-ecological simulation models or new earth observation tools, and decision support tools. The Synthesis Center will call for proposals, select the best experts, initiate research and associated activities, and support these activities with visiting postdocs and senior scientists.

Important features of the Synthesis Center's work will be the involvement of experts, decision-makers, and practitioners in a co-design process from the outset of each synthesis project, as well as the global visibility and impact of the Center and its products. The Synthesis Center will collaborate closely with the Regional Stewardship Hubs, the Transformational Research Teams, and the Engagement Platforms, ensuring impact at the regional level as well as impact and visibility at the global level.

### 2.2.4 Engagement Platforms

Scientific knowledge is useful only if it can be accessed and applied by people and organizations on the ground. Accessibility and relevance of this knowledge is best achieved by collaborating on equal terms with local people and organizations during every step from problem definition to knowledge generation, communication, and application. This close collaboration is the core activity of the Wyss Academy's Engagement Platforms. A regional Engagement Platform is an integral part of each regional hub, and jointly these regional Engagement Platforms will contribute to the international one run at the Wyss Academy headquarters. The international Engagement Platform will work with stakeholders and policymakers worldwide and provide knowledge and recommendations for future-oriented global policies for nature and people. It will draw from the knowledge and policy insights gained through the regional Engagement Platforms. An institutionalized exchange between the regional and international Engagement Platforms in the form of workshops, secondments, and staff exchanges will ensure that the regional realities are reflected in the global policy dialogue on conservation. The Engagement Platforms will also contribute to global assessments of conservation, climate, biodiversity, and land use, as well as developing concrete and context-specific options for transforming conservation and local development.

Emerging challenges and specific solutions will be discussed and developed in regular co-design workshops. This format has been successfully tested in Peru and Kenya and is an effective way of facilitating collaboration and exchange on equal terms among different stakeholder groups. Co-design workshops can generate various products, such as the establishment of round tables (see below), inputs in a policy development process, documents or briefs directly relevant to policy, or the identification of new incubator projects.

The regional Engagement Platforms will establish different round tables dedicated to specific challenges. These are intended to provide neutral ground for stakeholder exchanges and for promoting promising solutions tested in the incubator scheme. Emerging conflicts due to diverging interests or power imbalances can be addressed early and on a personal level in dialogues that are informed by science.

Capacity development is a constitutive element of the Engagement Platforms' activities. To this end, so-called "Wyss Ambassadors" will be recruited in each of the hub regions. They will foster awareness and dialogue, reaching out to new communities and building on alliances within and beyond their region. Wyss Ambassadors will also serve as personal entry points for people seeking services from the Regional Stewardship Hubs. Overall, they will help to maintain and enlarge the Wyss Academy's network.

## 2.3 Where Do We Stand in Five Years?

**Regional Stewardship Hubs**
The Regional Stewardship Hubs are fully operational and in continued exchange with each other, and they can build on the Engagement Platforms' institutional partner network. The hubs are recognized as knowledge brokers and for their advisory services on best practices and concrete solutions for protecting nature. Their knowledge platforms offering evidence-based near-real-time information and application-oriented knowledge are in high demand among civil society organizations, government administrations, and research institutions. A total of CHF 17.5 million have been invested in approximately 45 demand-oriented incubator projects in East Africa, Latin America, and Southeast Asia. The Regional Stewardship Hubs have allocated a significant portion of their budgets to local communities and partners for the joint implementation of incubator projects. Three to five incubator projects in each of the hub regions have been selected to be scaled up and out and have attracted third-party funding from donor agencies.

**Transformational Research Teams**
The activities of the Transformational Research Teams' leading scholars, associated postdoctoral researchers, and PhD students from the global North and South have gained recognition internationally and in the hub regions. Their first batch of projects have produced tangible and published research results. In addition, they are doing critical accompanying research on the incubator projects at the Regional Stewardship Hubs. They provide crucial feedback to the incubators and a constant flow of evidence-based knowledge for policy and practice. The Transformational Research Teams attract substantial competitive third-party funding from the Swiss National Science Foundation, government agencies, various foundations, and the European Commission.

**Synthesis Center**
The Synthesis Center is a fully functional unit of the Wyss Academy for Nature at the University of Bern. Four calls for working groups and two calls for visiting fellows annually attract top scholars from institutions worldwide. The Synthesis Center benefits from close cooperation with the Transformational Research Teams and gives visiting fellows unique access to the latest research results. The working groups and the visiting fellows have generated various products, including global assessment reports and high-impact articles in first-class journals that were taken up in the science press and the media in general. The products are also being taken up in the conservation community, where they inspire discussions and influence negotiations within the Convention on Biological Diversity, the 2030 Agenda for Sustainable Development, and the UN Framework Convention on Climate Change. In the science community, the Synthesis Center is recognized as "the place to be" when it comes to future-oriented concepts of nature conservation that integrates local communities' perspectives.

**Engagement Platforms**

The Engagement Platforms can build on institutionalized multi-stakeholder networks and is fully active and integrated in the Regional Stewardship Hubs. An intense exchange has been established between practitioners, policymakers, and a new generation of local scholars and students. This exchange spans the hub regions and enables transfer of innovations. Communities and stakeholders in the regions view their regional Engagement Platform as an indispensable forum for exchange and conflict mitigation through constructive negotiations, and appreciate it as an enabling environment for developing solutions. Independent evaluations after 4 years of operations have demonstrated the Engagement Platforms' effectiveness in generating and scaling out demand-driven innovations for nature and people. Internationally, the Engagement Platform ideally complements the Synthesis Center's activities. Its targeted products and events shape international conservation policies. Importantly, but not exclusively, it contributes to the concretization and implementation of the post-2020 global biodiversity framework and the post-Aichi targets in the Wyss Academy regions.

# 3 Organization and Management

The organizational structure of the Wyss Academy facilitates added value among the different units in line with its overall mission to develop innovative pathways for the protection of nature. The following subsections describe the organization of the Wyss Academy for Nature at the University of Bern and its regional and cantonal hubs with their specific organizational setup. They summarize a more comprehensive conceptual document on institutional and organizational issues that was developed within the pilot project (the report in German is available upon request).

## 3.1 The Wyss Academy for Nature at the University of Bern

The Wyss Academy for Nature at the University of Bern is planned to comprise the following main organizational levels and respective responsibilities:

**Board**
The Wyss Academy will be governed by a Board in charge of strategic leadership, which will be supported by an international Advisory Committee. The Wyss Academy Board will ensure that the goals and principles of the Wyss Academy are achieved with the greatest possible efficiency and effectiveness. The Board will have the overall operational, financial, and scientific responsibility and will facilitate the Academy's operations.

The Board will be composed of a maximum of nine people, including two representatives of the Wyss Foundation, and representatives of the Canton of Bern (Ministry of Economic Affairs), the Rectorate of the University of Bern, and possible additional funding partners, as well as the Wyss Academy Director (ex officio), and acknowledged scholars from the University of Bern and/or international experts. The regulations will include adequate provisions securing privileged rights for the principal funding partners Wyss Foundation, Canton of Bern, and University of Bern.

**Advisory Committee**
The Advisory Committee will consist of highly recognized national and international experts from academia, policy, civil society, and the private sector. This independent committee will be appointed by the Board and will support it through recommendations.

**Directorate and Executive Committee**
The Wyss Academy's director will be proposed and appointed by the Rector of the University of Bern based on prior consent of the Wyss Foundation and the Canton of Bern. Based on preliminary consultations, Prof. Peter Messerli is ready to assume directorship of the Wyss Academy. To fulfill his tasks, the Wyss Academy Director will work full-time for the Wyss Academy and will benefit from the rights and duties of a full professor of the University of Bern (examination and supervision of students, etc.). The Wyss Academy Director will be responsible for the Academy's operations, including coordination between the operational units and the activities of the Management Center. In line with the Wyss Academy's rules of procedure, the Director is responsible for granting mandates and assignments as required to achieve the Wyss Academy's goals and to implement the annual plans as endorsed by the Board. The Director will chair the Executive Committee, which will be composed of the heads of the Regional Stewardship Hubs, the Transformational Research Teams, the Management Center, the Science and Policy Outreach, and the Bern Hub.

The Management Center will ensure efficient financial and human resources administration, reporting and planning services, and content-related support, such as internal and external knowledge management as well as PR and communications. The head of Science and Policy Outreach will coordinate the Synthesis Center's activities and the international Engagement Platform.

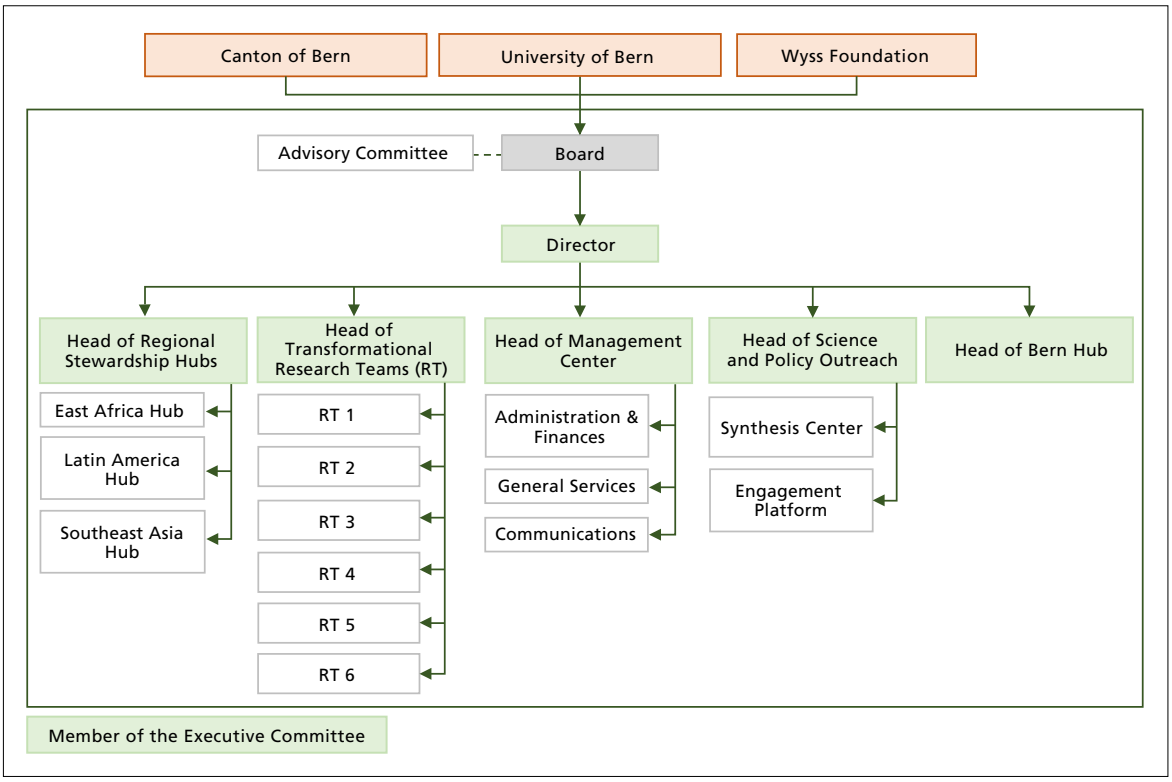


**Figure 3:** Wyss Academy for Nature at the University of Bern organization chart

### Operational units

The Academy's operational activities are grouped into five interlinked units: (1) a network of Regional Stewardship Hubs in the global South, (2) a cluster of up to six Transformational Research Teams, (3) a Management Center providing central services, (4) Science and Policy Outreach through the Synthesis Center and the Engagement Platform, and (5) the Bern Hub. Each of the units will be headed by a senior to be identified by the Wyss Academy Director and confirmed by the Wyss Academy Board. Further, each unit will be guided in the medium term by a strategic plan. This strategy will include the thematic orientation, staffing, budgeting, and modes of operation, and will be implemented on the basis of annual plans and reviews.

## 3.2 The Organizational Setup of the Regional Stewardship Hubs

The Regional Stewardship Hubs will be established as institutional entities of the University of Bern for the Wyss Academy in East Africa, Latin America, Southeast Asia, and Bern.

The organizational setup of the Regional Stewardship Hubs in the global South is addressed at four levels, each of which may be adapted according to the specific regional requirements:

1 **Management** led by a locally recruited director
2 **Regional Advisory Committee** consisting of the hub's main regional partners
3 **Three operational units:** Knowledge platform, incubator projects, Engagement Platform
4 **Services and administration** including finances and personnel

A small team of researchers and administrative personnel will support each hub director in ensuring effective and efficient operations. Besides ensuring the hub's core functions, this also includes guaranteeing fruitful and intense collaboration and exchange with other the Wyss Academy units (e.g. supporting research teams in their fieldwork). In addition to locally recruited personnel, one international expert in

the field of sustainability science and transformation will work at each of the Regional Stewardship Hubs in the global South. This expert will support the hub in its main activities as well as in ensuring coordination and exchange with the Transformational Research Teams, the Synthesis Center, and the international Engagement Platform based at the Wyss Academy headquarters.

The responsibility for identifying, proposing, planning, implementing, and reporting on incubator projects lies with the hub director. These tasks will be done building on the activities of the Engagement Platform and in consultation with the regional Advisory Committee. Incubator projects will be selected by the Wyss Academy Director with support from the Wyss Academy Executive Committee and in line with the strategic guidelines provided by the Wyss Academy Board. The Wyss Academy Executive Committee will be in charge of ensuring exchange with the Wyss Academy's various operational units and of coordinating accompanying research related to the incubator projects.

## 3.3 Organization and Governance of the Bern Hub

The Bern Hub will have an operational structure similar to that of the Regional Stewardship Hubs in the global South (consisting of a knowledge platform, incubator projects, and a regional Engagement Platform). The activities of the Bern Hub will be implemented jointly by the Wyss Academy and the Canton of Bern. The funds from the Canton of Bern for the incubator projects will be managed by the Bern Hub. The Bern Hub will be coordinated by a hub director appointed by the Wyss Academy Director. Supported by a small team and in consultation with the cantonal program coordinator, the hub director will be in charge of the Bern Hub's operations and of ensuring cooperation with the other Wyss Academy units, i.e. the other Regional Stewardship Hubs, the Transformational Research Teams, the Management Center, and the Science and Policy Outreach.

A project organization unit will be set up to ensure efficient implementation, uptake, and impact of the incubator projects in the Canton of Bern. It will comprise the following three levels:

- A **Strategic Board** consisting of a representative of the Wyss Academy Executive Committee (Chair), a representative of the Cantonal Ministry of Economic Affairs, and representatives from civil society and the private sector. This Board will oversee the strategic orientation and the activities of the Bern Hub, including selection and the performance of the hub's incubator projects.

- The **program management** consisting of the hub director and the program coordinator at the Cantonal Ministry of Economic Affairs. The program management will be in charge of operational tasks including planning, implementing, reporting, and accounting on incubator projects.

- **Project managers** responsible for the implementation of incubator projects. These will be employees either of the cantonal administration or of the Wyss Academy, or contractors of the Bern Hub.

# 4 Institutional Setup

With an annual turnover of CHF 22 million on average and activities on four continents, the Wyss Academy is a flagship project that depends on an adequate institutional setup. The Wyss Academy's institutional structure must enable agility and flexible cooperation with partners while providing a sound basis for secured operations. The institutional setup should also place the Wyss Academy in an ideal position to qualify for third-party funding (e.g. federal funds, program contributions), especially with a view to sustaining its operations beyond the now planned ten years.

## 4.1 Contractual Issues and Legal Form

We propose to base the Wyss Academy on a tripartite contract between the Wyss Foundation, the Canton of Bern, and the University of Bern. In line with this contract, the University of Bern, in consultation with the Wyss Foundation and the Canton of Bern, would issue a performance mandate to the Wyss Academy for Nature at the University of Bern detailing the scope of activities, deliverables, and performance indicators.

An in-depth assessment of different legal forms with support from an independent consulting firm revealed that a foundation which is formally linked to the University of Bern would best meet the Wyss Academy's various needs. A clear advantage of this legal form is that it enables alignment of the purpose and regulations of the foundation with the Wyss Academy's operational needs while ensuring eligibility for receiving in-kind services from the University. In particular, an independent foundation could open doors to cooperation with other research institutions outside the University of Bern as well as promoting partnerships with civil-society organizations and the private sector. Another important advantage concerns the long-term financing strategy. With this legal form, the Wyss Academy would qualify for example for core funding according to Article 15 of the Federal Act on the Promotion of Research and Innovation, as well as for program contributions from the Swiss Agency for Development and Cooperation (SDC). The final decision on the institutional setup and legal form will be made by the Wyss Academy Board.

## 4.2 Personnel and Accounting

The Wyss Academy is planned to be organized in accordance with the provisions and standards of the University of Bern. Financial reporting can be organized flexibly in line with the accounting requirements agreed by the Board (e.g. Swiss GAAP FER21 or others).

Another important issue is the contractual situation of the Wyss Academy personnel. They will be employed directly by the Wyss Academy or contracted by the relevant entities of the University of Bern. It is planned that Management Center personnel, operational staff without research tasks, and hub personnel will be employed by the Wyss Academy directly. Employment contracts will conform to the Act on Personnel of the Canton of Bern but may be issued based on the Swiss Code of Obligations. Members of research teams, including the Wyss Academy Director, will be employed by the relevant university entities and seconded to the Wyss Academy with physical workplaces at the Wyss Academy premises, since employment by the university is a prerequisite for pursuing an academic career, supervising students, and being part of the scientific community.

# 5 Planning and Evaluation

## 5.1 Work Plan

This section presents a rough work plan for the Wyss Academy until 2030. A detailed work plan will be developed during the preparation phase from July to December 2019. The detailed work plan will be subject to endorsement by the Wyss Academy Board.

| Phase / Activities | Application Jul – Dec '19 | Preparation Jan '19 – Jun '20 | Start-up Jul '20 – Jun '22 | Operating I Jul '22 – Jun '25 | Operating II Jul '25 – Jun '28 | Consolidation Jul '28 – Jun '30 |
|---|---|---|---|---|---|---|
| **Governance and finances** | | | | | | |
| Application to and decision by Wyss Foundation | | | | | | |
| Expiration of deadline for referendum against credit decision of Cantonal Parliament | | | | | | |
| Appointment of Wyss Academy Director | | | | | | |
| Preparation and development of project organization unit (Bern Hub) | | | | | | |
| Finalization of detailed Wyss Academy concept | | | | | | |
| Establishment of legal institutional basis | | | | | | |
| Contract between University of Bern, Canton of Bern, and Wyss Foundation | | | | | | |
| Appointment of Wyss Academy Executive Committee | | | | | | |
| Constitution and meetings of Wyss Academy Board | | | | | | |
| Endorsement of overall Wyss Academy strategy | | | | | | |
| Securing of long-term funding | | | | | | |
| **Coordination** | | | | | | |
| Establishment of Management Center including recruitment | | | | | | |
| Elaboration of rules of procedure and quality assurance | | | | | | |
| Coordination of medium-term and annual planning | | | | | | |
| Activity coordination support to operational units | | | | | | |
| Evaluation of processes and outputs | | | | | | |
| Financial reporting and auditing | | | | | | |
| **Operational units** | | | | | | |
| **Transformational Research Teams** | | | | | | |
| Calls for applications | | | | | | |
| Definition of activity plan and outputs | | | | | | |
| Research activities including field work | | | | | | |
| **Regional Stewardship Hubs** | | | | | | |
| Definition of hubs' institutional setup and selection of cooperating partners | | | | | | |
| Activity and output planning | | | | | | |
| Establishment of knowledge and data platform and data sharing principles | | | | | | |
| Co-definition and implementation of incubator projects | | | | | | |
| **Synthesis Center** | | | | | | |
| Definition of mode of operations | | | | | | |
| Identification of themes and topics and selection of teams and fellows | | | | | | |
| **Engagement Platform** | | | | | | |
| Strategic planning, including identification of relevant policy bodies and windows | | | | | | |
| Agreements with relevant policy organizations | | | | | | |
| Policy engagement through products and processes | | | | | | |

## 5.2 Reporting and Evaluation

Every December the Wyss Academy will provide an annual report highlighting activities and progress to the Wyss Academy Board, which will be evaluated by the Wyss Foundation, the University of Bern, and the Canton of Bern.

The Wyss Academy's performance will be evaluated regularly by the Board based on annual reports. Additionally, the Academy will be evaluated in a fair and open process after three years of operations. The evaluation will be coordinated by Wyss Foundation staff and will take into account the scope, criteria, and modalities suggested by the Wyss Academy Board. This assessment will be shared with the Wyss Academy Board for comments. Based on this consolidated evaluation report, the Wyss Foundation will decide whether to proceed. The Wyss Academy Board will be in charge of deciding on further evaluations. It is proposed to perform a mid-term evaluation after 5 years of operation and a further evaluation after 8 years. This latter review is intended to evaluate the performance and to assess potentials and options for a future beyond the agreed 10-year lifespan.

# 6 Funding and Resource Allocation

## 6.1 Funding Sources and Tied Contributions

The scope of activities and expected outcomes of the Wyss Academy described in this proposal is based on a total budget of CHF 200 million over a lifespan of ten years. This sum is composed of the CHF 100 million from the Wyss Foundation, paid in annual instalments of CHF 10 million over 10 years, as well as matching funds of CHF 50 million each contributed by the Canton of Bern and the University of Bern (see Annex 1 and 2 for credit decision of Cantonal Parliament and updated commitment letter from the University of Bern). The Parliament of the Canton of Bern approved the credit proposal with 120 votes in favor, 22 against, and 6 abstentions on 7 March 2019.

**Table 2:** Sources of funding for the Wyss Academy for Nature at the University of Bern

| Funding source | Annual average (in CHF million) | Total over 10 years |
|---|---|---|
| **Contributions by the University of Bern** | | |
| – Cash contribution | 3.0 | 30 |
| – Tied contributions (personnel working for the Wyss Academy) | 2.0 | 20 |
| – Total | **5.0** | **50** |
| **Contributions by the Canton of Bern** | | |
| – Increase of state contribution to the University | 1.7 | 17 |
| – Rental of the Wyss Academy premises | 0.3 | 3 |
| – Incubator project funding | 3.0 | 30 |
| – Total | **5.0** | **50** |
| **Total contribution by Canton und University** | **10.0** | **100** |
| **Contribution by Wyss Foundation** | **10.0** | **100** |
| **Grand total** | **20.0** | **200** |

From the cantonal contribution, an amount of CHF 20 million in cash over ten years will go directly to the Wyss Academy, partly as an additional, earmarked state contribution to the University of Bern, and partly in the form of premises to be rented for the Wyss Academy. CHF 30 million in cash over ten years will be used to run an implementation program with incubator projects in the Canton of Bern under the supervision of the Wyss Academy (see Annex E, in separate PDF).

The University of Bern's contribution to the Wyss Academy is composed of a cash contribution of CHF 30 million and tied contributions worth CHF 20 million, both over ten years. Tied contributions consist of university personnel working exclusively for the Wyss Academy. It is important to note that double-counting of already acquired third-party projects as tied contributions is excluded.

## 6.2 Resource Allocation

It is planned that 50% of the total funding will be invested in cash in the three Regional Stewardship Hubs and the Bern Hub. Of the CHF 100 million grant of the Wyss Foundation, CHF 70 million will be directly invested in activities at the Stewardship Hubs in the global South. The other 50% will be earmarked for the activities of the Transformational Research Teams, the Synthesis Center, the international Engagement Platform, and the Management Center.

**Table 3:** Funding allocation to the units of the Wyss Academy for Nature at the University of Bern

| Budget item | Amount (in CHF million) | Share (%) |
|---|---|---|
| Regional Stewardship Hubs in the global South | 70 | 35% |
| Bern Hub | 30 | 15% |
| Transformational Research Teams | 40 | 20% |
| Synthesis Center | 20 | 10% |
| Engagement Platform | 20 | 10% |
| Management Center | 20 | 10% |
| **Total** | **200** | **100%** |

## 6.3 Funding and Financial Sustainability

The establishment and development of the Wyss Academy will take place in several phases. During a two-year start-up phase, the various the Wyss Academy units in Bern and the Regional Stewardship Hubs in the global South will build up their structures and activities, with a gradually increasing budget. For the research teams, this includes the task of acquiring complementary research funding. Assuming a starting date of the Wyss Academy in early 2020, the Wyss Academy will be fully operational as of July 2022, with an annual turnover of approximately CHF 23 million. From July 2025 onwards, the Wyss Academy will begin to make concrete efforts towards sustaining operations beyond the ten-year financial commitment of the Wyss Foundation and the Canton of Bern. The aim will be to substitute these funding sources at least partly, by diversifying donors and stepping up acquisition of third-party funds. This will include applying for core funding as a research facility of national importance under Article 15 of the Swiss Federal Act on the Promotion of Research and Innovation (FIFG). Furthermore, the aim will be to secure funding of the Regional Stewardship Hubs after 2029 through bilateral or multilateral development cooperation agencies. We have already approached the Swiss Agency for Development and Cooperation in this regard, and they agreed to further explore possibilities of collaborative arrangements between the Wyss Academy and their research and implementation initiatives. Last but not least, the University of Bern holds out the prospect of continued financial investments in the Wyss Academy beyond its current 10-year commitment.

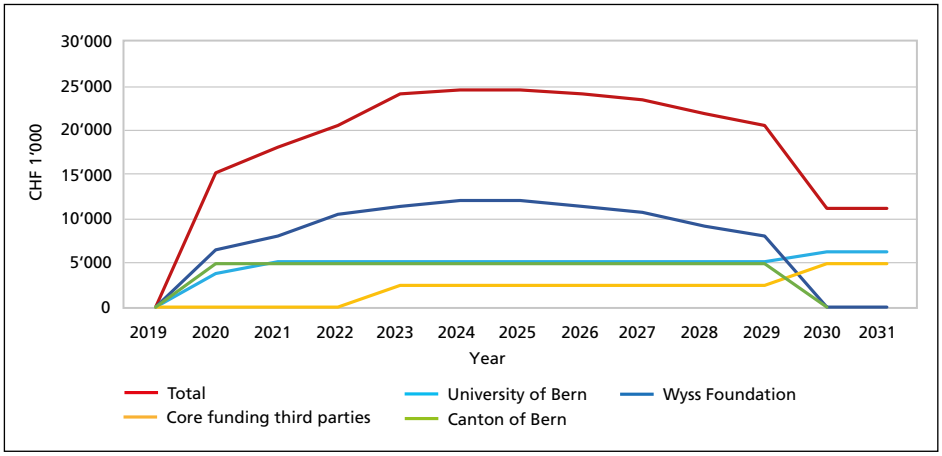


**Figure 4:** Funding sources over time and post–2029 scenario

# 7 Annexes

1 Official letter of endorsement from the University of Bern
2 Official letter of endorsement from the Canton of Bern

In separate PDF:
A Summary of co-design workshop in Isiolo, Kenya
B Summary of co-design workshop in Lima, Peru
C Planned and potential incubator ideas for the East Africa Hub
D Planned and potential incubator ideas for the Latin America Hub
E Potential incubator ideas for the Bern Hub

b
UNIVERSITÄT
BERN

Rektorat
**Generalsekretariat**

Generalsekretariat, Hochschulstrasse 6, 3012 Bern

Wyss Foundation
1759 R St NW
Washington DC 20009
USA

Bern, 16 September 2019

**Wyss Center Bern**

To whom it may concern,

This is to confirm that the University of Bern fully supports establishment of the Wyss Center Bern – Shaping sustainable futures for nature and people. The University of Bern and its research entities CDE, OCCR, and IPS will assume responsibility for the implementation of the activities outlined in the project proposal submitted to the Wyss Foundation on March 31, 2019.

We further confirm that on August 13, 2019, the University Rectorate formally approved increasing its financial investment in the center's operations by CHF 10 million, resulting in a financial investment of the University's own resources of CHF 30 million over a period of 10 years, along with additional tied contributions worth CHF 20 million over the same period. The funding decision includes the University's commitment to establish, in consultation with the Board of the Wyss Center Bern, a specific entity that will be affiliated to the University of Bern.

Yours sincerely,

Dr. Ch. Pappa
Secretary General

Dr. Christoph Pappa
Generalsekretär/Leiter Rechtsdienst
Hochschulstrasse 6
3012 Bern

Tel. +41 31 631 52 35
christoph.pappa@gs.unibe.ch
www.generalsekretariat.unibe.ch

# Decision of the Cantonal Parliament

*English is not an official language of the Canton of Bern. This translation is provided for information purposes only and has no legal force.*

Date of Session: 7 March 2019
Item Number: RRGR.7592019

**Wyss Center Bern; Co-Funding, Share of Canton of Bern;
Authorization of Expenditure; Framework Credit for 2020–2029**

## 1 Subject

The Bernese entrepreneur and philanthropist Hansjörg Wyss and his foundation (Wyss Foundation, based in Washington, D.C.) are considering launching a “Wyss Center Bern” (WCB) in collaboration with the University of Bern and the Canton of Bern. WCB is intended to bring together research, practice, and policy dialogue on climate change, biodiversity, and land use, and to implement concrete projects in the field of sustainable resource management. By doing so, WCB is to make important scientific and practical contributions to sustainable development worldwide and in Switzerland. WCB will be an organizational unit of the University of Bern. The Canton of Bern will sit on the steering committees.

Application will be made for a contribution from the Wyss Foundation totaling CHF 100 million over ten years. A precondition for this contribution is that Bern as the location of headquarters likewise contributes CHF 100 million (co-funding). WCB is to become fully operational after a development phase of no more than two years. The host location’s co-funding concept requires that 50 percent of the funds are provided by the canton and 50 percent by the university; this amounts to an annual average of five million Swiss francs each. The present credit decision pertains exclusively to the cantonal share in the co-funding to be provided by Bern as the host location. The university will make its contribution from its regular budget.

## 2 Legal basis

*The list below has been left untranslated, as the listed acts and ordinances exist exclusively in German and French.*

- Bundesgesetz über die Förderung von Hochschulen und die Koordination im schweizerischen Hochschulbereich vom 30. September 2011 (Hochschulförderungs- und -koordinationsgesetz, HFKG; SR 414.20)
- Gesetz vom 5. September 1996 über die Universität (UniG; BSG 436.11): Art. 2, 6, 52 und 62
- Bundesgesetz vom 6. Oktober 2006 über die Regionalpolitik (SR 901.0): Art. 4 und 6
- Kantonales Gesetz vom 16. Juni 1997 über Investitionshilfe für Berggebiete (KIHG; BSG 902.1): Art. 2

- Bundesverfassung vom 18. April 1999 der Schweizerischen Eidgenossenschaft (BV; SR 101): Art. 78 Abs. 5
- Bundesgesetz vom 1. Juli 1966 über den Natur- und Heimatschutz (NHG; SR 451): Art. 18 bis 23d
- Bundesgesetz vom 21. Juni 1991 über die Fischerei (BGF, SR 923.0); Art. 1, 5 Abs. 2 und Art. 7 Abs. 2
- Verordnung vom 21. Januar 1991 über den Schutz der Hoch- und Übergangsmoore von nationaler Bedeutung (Hochmoorverordnung; SR 451.32)
- Verordnung vom 7. September 1994 über den Schutz der Flachmoore von nationaler Bedeutung (Flachmoorverordnung; SR 451.33)
- Kantonales Landwirtschaftsgesetz vom 16. Juni 1997 (KLwG; BSG 910.1): Art. 18 Abs. 1 und Art. 2
- Kantonales Naturschutzgesetz vom 15. September 1992 (BSG 426.11): Art. 1 Abs. 1 Bst. c
- Kantonale Naturschutzverordnung vom 10. November 1993 (NSchV; BSG 426.111): Art. 33 Abs. 1. Bst. c
- Kantonales Gesetz über die Fischerei (FiG; BSG 923.11): Art. 1 und 5
- Kantonales Energiegesetz vom 15. Mai 2011 (KEnG; BSG 741.1): Art. 1, 2, 7, 8 und 55
- Kantonales Wirtschaftsförderungsgesetz vom 12. März 1997 (WFG; BSG 901.1): Art. 1, 2, 3 und 5
- Kantonales Abfallgesetz vom 18. Juni 2003 (AbFG; BSG 822.1): Art. 1 und 2
- Bundesgesetz über den Wald vom 4. Oktober 1991 (WaG; SR 921.0): Art. 1, 19, 20, 27, 28a, 36, 37, 37a, 38 und 38a
- Verordnung über den Wald vom 30. November 1992 (WaV; SR 921.01): Art. 37b, 39, 40, 40a, 41, 43 und 45
- Staatsbeitragsgesetz vom 16. September 1992 (StBG; BSG 641.1)
- Kantonales Waldgesetz vom 5. Mai 1997 (KWaG; BSG 921.11): Art. 1, 2, 12, 32, 33, 38 und 45
- Kantonale Waldverordnung vom 29. Oktober 1997 (KWaV; BSG 921.111): Art. 21, 36, 37, 38, 45 und 51c
- Gesetz vom 20. Juni 1995 über die Organisation des Regierungsrates und der Verwaltung (Org; BSG 152.01): Art. 27, 32 und 33

- Verordnung vom 27. November 2002 über die Organisation und die Aufgaben der Erziehungsdirektion (OrV ERZ; BSG 152.221.181): Art. 12
- Verordnung vom 18. Oktober 1995 über die Organisation und die Aufgaben der Bau-, Verkehrs- und Energiedirektion (OrV BVE; BSG 152.221.191): Art. 14
- Verordnung vom 18. Oktober 1995 über die Organisation und die Aufgaben der Volkswirtschaftsdirektion (OrV VOL; BSG 152.221.111): Art. 7, 8, 9 und 10
- Gesetz vom 26. März 2002 über die Steuerung von Finanzen und Leistungen (FLG; BSG 620.0): Art. 46, 48 Abs. 1 und 53
- Verordnung vom 3. Dezember 2003 über die Steuerung von Finanzen und Leistungen (FLV; BSG 621.1): Art. 149

## 3 Type and legal qualification of expenditure

New, one-off expenditure in accordance with Art. 46 and Art. 48, Para. 1, Let. a of the Cantonal Act on the Control of Finances and Services (FLG).

## 4 Relevant credit sum

The framework credit for co-funding of the Wyss Center Bern amounts to CHF 50 million for the years 2020–2029.

The ten-year core funding in the amount of CHF 20 million for WCB will go directly to WCB; partly as an additional, earmarked state contribution to the University of Bern, and partly as a contribution in the form of rented premises.

CHF 30 million over ten years will be used to run an implementation program in the Canton of Bern with innovative projects in the fields of climate change, biodiversity, and land use. Based on an initial program, a specific project organization unit at the Bern Hub will develop it further and submit it to the Cantonal Government for approval via the WCB Board each year. Only projects for which the Bern Hub's project organization unit and WCB have submitted a funding application to the Canton of Bern and which are included in the implementation program approved by the Cantonal Government will be considered.

## 5 Credit type / account / product group / accounting year

Framework credit. Planned fulfillment of payments that are not yet integrated in the 2020 budget or the task and finance plan for 2021–2023 and subsequent years, and still need to be added. In the longer term, further offices may be included if necessary.

| Account | Product group | Office | Accounting year | Amount in CHF |
|---|---|---|---|---|
| 363400<br><br>Contributions to public enterprises | 03.16.9800 Economic development and supervision | Office of economic affairs (beco) | 2020–2029 | CHF 30.00 million |

| | | | | |
|---|---|---|---|---|
| | 03.20.9190 Nature<br><br>03.19.9180 Agriculture<br><br>03.21.9100 Forest and natural hazards<br><br>09.03.9100 Sustainable development | Office for agriculture and nature (LANAT)<br><br>Office of Forests (KAWA)<br><br>Office of environment coordination and energy (AUE) | | |
| 363400<br><br>Contributions to public enterprises | 08.14.9100 University education | Office of higher education (AH) | 2020–2029 | CHF 17.00 million |
| 316000<br><br>Rent + lease | 09.15.9100 Real estate management | Office for real estate (AGG) | 2020–2029 | CHF 3.00 million |
| Total | | | | CHF 50.00 million |

The University of Bern will likewise contribute an annual share of CHF 5 million in the years 2020–2029, which will equally result in a total of CHF 50 million over that same period. The contributions will be made from the university's regular budget, without any corresponding increase of current funding levels.

## 6 Entity responsible for credit usage and for extension of validity period

The framework credit will be fulfilled through executory decisions. The responsibility for executory decisions concerning projects with a total volume of up to CHF 1 million is with the organizational units designated in the implementation program approved by the Cantonal Government. Executory decisions concerning projects with a total volume of more than CHF 1 million will be made by the Cantonal Government.

The additional space requirements will be entered in the AGG's regular ordering process and must be handled in such a way that WCB can start operations at the beginning of 2020 as planned. Regarding executory decisions concerning the rental of premises, executory decisions on amounts up to CHF 200,000 annually will be made by the Ministry of Construction, Transport and Energy (BVE); executory decisions on amounts greater than CHF 200,000 annually will be made by the Cantonal Government. Executory decisions concerning earmarked

increases in the state contribution to the University of Bern will be made by the Cantonal Government, taking notice of facility costs. The detailed clarification of how WCB's space requirements will be met may still lead to changes to the chargeable facility costs based on potential synergies with other university units. In the budgeting process for the 2020 budget and financial planning, BVE is permitted to increase the ceiling for funds to cover rents by the amount of the chargeable facility costs.

In accordance with the calculations of additional space requirements, the increase in the state contribution to the University of Bern must be chosen in such a way that the total amount of core funding (including facility costs) remains constant over 10 years (CHF 20 million). Any shifts between product groups must be approved by the Cantonal Government.

The cantonal co-funding contribution is contingent upon equal co-funding by the University of Bern and a contribution from the Wyss Foundation in the years 2020–2029 totaling at least CHF 100 million. Should the Wyss Foundation reduce or withhold its contribution based on evaluation results or other reasons, the cantonal co-funding contribution will be reduced or withheld in parallel with the Wyss Foundation's contribution.

Any decisions on an extension of the validity period will be made by the Cantonal Government.

## 7 Contract

As part of this authorization of expenditure, following the decision of the Cantonal Parliament, the Ministry of Economic Affairs shall be authorized to prepare the necessary contractual agreements with the Wyss Foundation and the University of Bern in order to apply to the Cantonal Government for approval of the contract and the implementation program after expiry of the deadline for a referendum.

## 8 Financial referendum

This authorization of expenditure is subject to an optional referendum and must be published in the official gazette.

Bern, 7 March 2019

On behalf of the Cantonal Parliament
The President: *Iseli*
The General Secretary: *Trees*

University of Bern
Hochschulstrasse 6
3012 Bern
Switzerland