



SUNRAISE CURRICULA AND LEARNING CONTENTS Intermediate Report

Outline

01. Work package leaders
02. Objectives
03. Deliverables
04. Tasks fulfilled
05. Results



01. Work package leaders

Work package 2 has been carried out under the leadership of partners P2 (University of Salzburg, Austria) and P9 (Royal University of Bhutan, Bhutan), who have coordinated and ensured the smooth and successful realisation of all work package activities, as well as the quality of all results. In particular, it was intended that P2 was in charge of the coordination of activities within WP2.3 (see the two sections below), while WP2.2 had to be completely supervised by P9. The supervision of WP2.1 had to be shared among both P2 and P9. However, due to impossibility of the latter partner to participate in the leadership of the work package, all activities related to the coordination and supervision of work package 2 have been carried out by P2.

02. Objectives

The objective of work package 2 is to build sufficient capacity for sustainable maintenance of SUNRAISE curricula and learning contents by upgrading existing and developing new courses, upgrading the PhD research framework, and training of academic staff and PhD students. To that end, 3 sub-packages were created: 1) WP2.1 aiming at the revision and development of SUNRAISE courses and learning materials; 2) WP2.2 aiming at strengthening the research and teaching capacity of SUNRAISE partners through modernisation of PhD research agenda; and 3) WP2.3 aiming at the realisation of a range of SUNRAISE training activities related to the development of curricula and learning materials following the programme approved by the Steering Committee.

03. Deliverables

For each of the sub-packages defined, the deliverables to be produced are:

- **WP2.1:** circa 12 ECTS and 30 ECTS of significantly updated existing courses and new courses, respectively, which are targeted to bachelor, master or PhD students. For the revision of existing courses, this involves the revision of approximately 3 courses worth at least 3 ECTS by each of the 7 involved partners, but partner P2. The latter partner is only responsible for the production of a new optional course. All new and revised courses have to be accredited, implemented and their quality assessed by stakeholders, an EU partner and an external reviewer before the conclusion of the project.

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Partners involved	Expected deliverables		Quality assessment of the courses		
	Study programmes that will be improved	Document types that will be delivered	Local stakeholders involved in the quality assessment	EU partners involved in the quality assessment (cross-peer evaluation)	External reviewer in charge of the quality assessment
P2 (University of Salzburg, Austria)	1 optional MSc/PhD course that can be used by partners P5-P7, P9, P11-P12 for improving their study programmes	<ul style="list-style-type: none"> - Overview on the revised/ newly created courses - Updated/ newly created syllabus - Teaching materials, including the lecture notes - Accreditation documents (<i>not applicable in the case of P2</i>) - Evaluation sheets with the results of the students' and staff's appraisal about the course after implementation - Critical reviews by local stakeholders, an EU partner, and an external reviewer about each of the newly created/ revised courses 	<i>Not applicable</i>	P3 (Estonian University of Life Sciences, Estonia)	Attila Katona
P5 (Russian State Hydrometeorological University, Russia)	- BSc and MSc programmes in applied hydrometeorology, ecology and natural resource management		?	P1 (University of Bremen, Germany)	
P6 (Siberian Federal University, Russia)	<ul style="list-style-type: none"> - BSc programmes in geography, ecology and natural resource management, amelioration, and water resource management - MSc programmes in spatial planning, sustainable development and environmental safety, fundamental ecology, nature conservation, environment of polar oil- and gas-producing regions, and environmental monitoring 		?	P3 (Estonian University of Life Sciences, Estonia)	
P7 (Gorno-Altai State University, Russia)	BSc and MSc programmes in geography, ecology and natural resource management		?	P2 (University of Salzburg, Austria)	

Partners involved (cont.)	Expected deliverables		Quality assessment of the courses		
	Study programmes that will be improved	Document types that will be delivered	Local stakeholders involved in the quality assessment	EU partners involved in the quality assessment (cross-peer evaluation)	External reviewer in charge of the quality assessment
P9 (Royal University of Bhutan, Bhutan)	Degree programmes in sustainable development, forestry and agriculture	<ul style="list-style-type: none"> - Overview on the revised/ newly created courses - Updated/ newly created syllabus 	?	P3 (Estonian University of Life Sciences, Estonia)	Attila Katona
P11 (Kumaun University, India)	Degree programmes in Forestry, Geology and Geographical Information Science/ Geography	<ul style="list-style-type: none"> - Teaching materials, including the lecture notes - Accreditation documents (<i>not applicable in the case of P2</i>) - Evaluation sheets with the results of the students' and staff's appraisal about the course after implementation - Critical reviews by local stakeholders, an EU partner, and an external reviewer about each of the newly created/ revised courses 	<ul style="list-style-type: none"> - AAROH - Centre for Himalayan Environment and Climate Change Studies - Uttarapath Sewa Sanstha - Centre for Environmental Assessment and Climate Change 	P2 (University of Salzburg, Austria)	
P12 (Jawaharlal Nehru University, India)	BSc and MSc programmes in environmental sciences and ecology		<ul style="list-style-type: none"> - WWF-India - The Energy and Resources Institute (TERI) - Symbiosis Institute of Geoinformatics (SIG) 	P3 (Estonian University of Life Sciences, Estonia)	



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



- **WP2.2:** development of the SUNRAISE research training framework, which should outline issues and problems and discuss the latest international literature and possible directions of relevant PhD research. Based on this framework, institutional and department research agendas have to be developed by project partners P5, P6, P7, P9, P11, and P12. These research agendas will provide support to PhD (but also MSc/MA) students and their supervisors to identify the research topics and plan thesis contents relevant to the latest scientific and policy developments. The allocation of at least 7 PhD positions is foreseen. Further, the completion of the sub-package has to result in the revision of “passports of PhD specialisations” by partners P5, P6, and P7. The quality of all these activities is ensured by partner P2.
- **WP2.3:** carrying out of training events, including 3 open call international summer schools targeted to academic faculty and PhD students (see table below). The execution of other training formats including 6 onsite seminars by EU faculty, and short study visits is also foreseen.

Partners involved	Expected deliverables	Quality assessment
P6 (Siberian Federal University, Russia) And P7 (Gorno-Altai State University, Russia)	Summer school on SDGs and monitoring of early warnings in management of mountain areas in 2018	Evaluation of the activities by the participants
P2 (University of Salzburg, Austria)	Summer school on urbanization forced by tourism in sensitive arctic and high mountain regions in 2019	Evaluation of the activities by the participants
P5 (Russian State Hydrometeorological University, Russia)	Summer school on international and European aspects of natural resources governance in the Arctic in 2021 (it was initially planned for August 2020, but had to be postponed due to the Covid-19 pandemic)	Evaluation of the activities by the participants

04. Tasks fulfilled

On 28 February 2021, the status of all work package-related activities is as follows:

- **WP2.1:** courses have been revised and newly created by all project partners in charge, have been accredited by the respective accreditation bodies, and implemented in the respective academic institutions. All required documents (including syllabi, etc.) have already been provided to the project managers for revision and made freely available or will be launched very soon. The delay in the latter case has been due to unexpected difficulties by some partners. On the other hand, results are already available on the evaluation of the courses’ implementation by students and staff members, and the quality assessment process by local stakeholders, EU partners and an external reviewer is also underway. The latter is expected to be finished before long. The status by each partner is pointed out in the tables below:

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Project partner: P2 (University of Salzburg, Austria)						
Status of the deliverables up to 28.02.2021						
1 new course – 3 ECTS						
Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Piloting	Quality assessment
No particular programme targeted (this is an optional course that can be used by any partners for improving their study programmes)	1 course newly created (3 ECTS)		<i>Not applicable</i>	<i>Not applicable</i>	At P9 (Royal University of Bhutan). Done together with P9, P11 and P12.	

Legend (level of fulfilment) Done Ongoing Pending

New course 1: Synoptic meteorology of the Arctic region (BSc programme in hydrometeorology (aviation meteorology major))											
Basic information		Fulfilment of the task	Course materials			Accreditation	Piloting		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already piloted	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc/ PhD	3	✓	✓	✓	✓	<i>Not applicable</i>	✓ in August 2019 at P9 (Royal University of Bhutan) (12 students taught)	X	<i>Not applicable</i>	<i>Not applicable</i>	X

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Project partner: P5 (Russian State Hydrometeorological University, Russia)						
Status of the deliverables up to 28.02.2021						
3 courses revised + 1 new course – 9 ECTS						
Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Implementation	Quality assessment
BSc programme in hydrometeorology (aviation meteorology major)	1 course newly created (3 ECTS)					
MSc programme in ecology and natural resource management	2 courses revised (6 ECTS)					

Legend (level of fulfilment) Done Ongoing Pending

Course revised 1: Environmental safety of mineral resources exploration on the Arctic shelf (MSc programme in ecology and natural resource management)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc	3	✓	✓	X	X	✓	✓ since the academic year 2019-20 (11 students taught to date)	X	✓	✓ done by partner P1 (University of Bremen)	X

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Course revised 2: The impact of climate and its changes on the state of ecosystems and human activity in the polar and mountainous regions (MSc programme in ecology and natural resource management)

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc	3	✓	✓	x	x	✓	✓ since the academic year 2019-20 (13 students taught to date)	x	✓	x	x

New course 1: Synoptic meteorology of the Arctic region (BSc programme in hydrometeorology (aviation meteorology major))

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	3	✓	✓	x	x	✓	✓ since the academic year 2019-20 (12 students taught to date)	x	✓	x	x

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

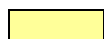


Project partner: P6 (Siberian Federal University, Russia)						
Status of the deliverables up to 28.02.2021						
5 courses revised + 1 new course – 17 ECTS						
Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Implementation	Quality assessment
BSc programme in ecology and environmental management	4 courses revised (11 ECTS)					
MSc programme in ecology and environmental management	1 course revised and 1 course newly created (6 ECTS)		One course is unfortunately missing in the table			
MSc programme in sustainable development and environmental safety	1 course revised (3 ECTS)					
MSc programme in environmental monitoring	1 course revised (3 ECTS)					

Legend (level of fulfilment)



Done



Ongoing



Pending

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Course revised 1: Environmental Biomonitoring (Mountain module) (MSc programme in ecology and environmental management, MSc programme in sustainable development and environmental safety, and MSc programme in environmental monitoring)

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc	3	✓	x	✓	x	x	✓ since the academic year 2018-19 (36 students taught to date)	x	x	x	x

Course revised 2: Natural-resource potential of regions (Mountain and Arctic modules) (BSc programme in ecology and environmental management)

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	3	✓	✓	x	✓	✓	✓ since the academic year 2018-19 (42 students taught to date)	x	✓	✓ done by partner P3 (Estonian University of Life Sciences)	x

**SUNRAISE CURRICULA AND
LEARNING CONTENTS**

Intermediate Report



Course revised 3: Plant Ecology (Mountain and Arctic modules) (BSc programme in ecology and environmental management)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	3	✓	✓	X	✓	✓	✓ since the academic year 2018-19 (80 students taught to date)	X	X	✓ done by partner P3 (Estonian University of Life Sciences)	X

Course revised 4: Soil Ecology (Mountain and Arctic modules) (BSc programme in ecology and environmental management)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	3	✓	✓	X	✓	✓	✓ since the academic year 2018-19 (38 students taught to date)	X	X	✓ done by partner P3 (Estonian University of Life Sciences)	X

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

**SUNRAISE CURRICULA AND
LEARNING CONTENTS**

Intermediate Report



Course revised 5: Sustainable Development (Mountain and Arctic modules) (BSc programme in ecology and environmental management)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	2	✓	✓	X	✓	✓	✓ since the academic year 2019-20 (27 students taught to date)	X	✓	✓ done by partner P3 (Estonian University of Life Sciences)	X

New course 1: Biogeochemistry of permafrost landscapes (MSc programme in ecology and environmental management)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc	3	✓	✓	X	✓	X	✓ since the academic year ? (35 taught to date)	X	X	✓ done by partner P3 (Estonian University of Life Sciences)	X

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



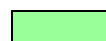
Project partner: P7 (Gorno-Altai State University, Russia)

Status of the deliverables up to 28.02.2021

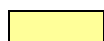
1 course revised + 3 new courses – 11 ECTS

Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Implementation	Quality assessment
BSc programme in ecology and environmental management	1 course revised and 1 course newly created (5 ECTS)					
BSc programme in geography	1 course newly created (2 ECTS)					
MSc programme in ecology and environmental management	2 courses newly created (6 ECTS)					
MSc programme in geography	2 courses newly created (6 ECTS)					

Legend (level of fulfilment)



Done



Ongoing



Pending

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Course revised 1: Environmental design and expertise (BSc programme in ecology and environmental management)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	3	✓	✓	✓	✓	✓	✓ since the academic year 2018-19 (39 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	X

New course 1: A Special Course in a Foreign Language (based on the MOOC “Sustainable Development of Mountain Territories in the Context of the Concept of Ecosystem Services”) (BSc programme in ecology and environmental management and BSc programme in geography)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
BSc	2	✓	✓	✓	✓	✓	✓ since the academic year 2020-21 (8 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	X

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



New course 2: Sustainable development of mountain territories (MSc programme in ecology and environmental management and MSc programme in geography)

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc	3	✓	✓	✗	✓	✓	✓ since the academic year 2019-20 (33 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	✗

New course 3: Waste management (MSc programme in ecology and environmental management and MSc programme in geography)

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
MSc	3	✓	✓	✓	✓	✓	✓ since the academic year 2019-20 (13 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	✗

**SUNRAISE CURRICULA AND
LEARNING CONTENTS**

Intermediate Report



Project partner: P9 (Royal University of Bhutan, Bhutan)						
Status of the deliverables up to 28.02.2021						
? courses revised + ? new courses – ? ECTS						
Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Implementation	Quality assessment
Degree programmes in sustainable development, forestry and agriculture	? course revised and ? course newly created (? ECTS)					

Legend (level of fulfilment)

Done
 Ongoing
 Pending

**SUNRAISE CURRICULA AND
LEARNING CONTENTS**

Intermediate Report



Project partner: P11 (Kumaun University, India)						
Status of the deliverables up to 28.02.2021						
2 courses revised + 2 new courses – 16 ECTS						
Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Implementation	Quality assessment
M.A. and MSc programme in geography	2 courses revised and 2 courses newly created (16 ECTS)					

Legend (level of fulfilment) Done Ongoing Pending

Course revised 1: Integrated Watershed Management (M.A. and MSc programme in geography)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.A. and MSc	4	✓	✓	✓	✗	✓	✓ since the academic year 2019-20 (50 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	✗

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

**SUNRAISE CURRICULA AND
LEARNING CONTENTS**

Intermediate Report



Course revised 2: Natural Resource Management (M.A. and MSc programme in geography)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.A. and MSc	4	✓	✓	X	✓	✓	✓ since the academic year 2019-20 (250 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	X

New course 1: Climate Change Impacts and Adaptation in Himalaya (M.A. and MSc programme in geography)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.A. and MSc	4	✓	✓	X	✓	✓	✓ since the academic year 2019-20 (60 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	X

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



New course 2: Integrated Mountain Development with Special Reference to Indian Himalaya (M.A. and MSc programme in geography)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.A. and MSc	4	✓	✓	✓	X	✓	✓ since the academic year 2019-20 (50 students taught to date)	✓	✓	✓ done by partner P2 (University of Salzburg)	X

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Project partner: P12 (Jawaharlal Nehru University, India)

Status of the deliverables up to 28.02.2021

2 courses revised + 4 new courses – 18 ECTS

Programmes expected to be improved	Activities set	Level of fulfilment				
		Courses revised/ newly created	Overview of the courses provided	Accreditation	Implementation	Quality assessment
M.A. programme in disaster studies	3 courses newly created (12 ECTS)					
M.Phil. programme in environmental sciences	2 courses revised and 1 course newly created (6 ECTS)					

Legend (level of fulfilment)

Done

Ongoing

Pending

Course revised 1: Ecosystem Processes (M.Phil. programme in environmental sciences)

Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.Phil.	2						✓ since the academic year 2020-21 (? students taught to date)				

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

**SUNRAISE CURRICULA AND
LEARNING CONTENTS**

Intermediate Report



Course revised 2: Man & Tropical Forest Ecosystem Function (M.Phil. programme in environmental sciences)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already revised?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.Phil.	2	✓	✓	✗	✗	✗	✓ since the academic year 2020-21 (? students taught to date)	✗	✓	✗	✗

New course 1: Ecosystem Approach for Disaster Risk Reduction (M.A. programme in disaster studies)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.A.	4	✓	✓	✓	✗	✗	✓ since the academic year 2019-20 (? students taught to date)	✓ only the students have answered the questionnaire	✓	✗	✗

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



New course 2: Himalayan Ecology (M.Phil. programme in environmental sciences)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.Phil.	2	✓	✓	✗	✗	✗	✓ since the academic year 2020-21 (? students taught to date)	✗	✓	✗	✗

New course 3: Remote Sensing, GIS for Emergency Management (M.A. programme in disaster studies)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.Phil.	4	✓	✓	✓	✓	✗	✓ since the academic year 2019-20 (? students taught to date)	✓ only the students have answered the questionnaire	✓	✗	✗

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



New course 4: Risk, Vulnerability and Resilience: Concepts and Understanding (M.A. programme in disaster studies)											
Basic information		Fulfilment of the task	Course materials			Accreditation	Implementation		Quality assessment		
Study level	Number of ECTS	Already created?	Syllabus available	Lecture notes/ guidelines available	Other teaching materials available	Accreditation documents available	Already implemented	Evaluation by the students/ staff	Quality assessment by stakeholders	Quality assessment by EU partners	Quality assessment by an external reviewer
M.Phil.	4	✓	✓	✓	✓	X	✓ since the academic year 2019-20 (? students taught to date)	✓ only the students have answered the questionnaire	✓	X	X



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

- **WP2.2:** new institutional and departments research agendas have been developed by most of the project partners concerned, PhD positions allocated, and “passports of PhD specialisations” revised by partners P5, P6 and P7. Due to the inexistence of a PhD programme in partner P9’s institution and the impossibility to create it given administrative issues, partner P9 has reported that no PhD positions can be allocated on the topics of the project. The development of the SUNRAISE research training framework is also ongoing and it is expected to be launched shortly.

SUNRAISE research training framework		
Partners in charge: P2 (University of Salzburg, Austria) and Anton Shkaruba (SUNRAISE project leader)		
Status of the deliverables up to 28.02.2021		
Steps	Activities set	Level of fulfilment
STEP 1	Identification and preparation of a listing of research areas that might potentially be included in the framework	<i>Prepared by partner P2 and the project leader (Anton Shkaruba)</i>
STEP 2	Sharing of the listing with the project partners P5, P6, P7, P9, P11 and P11 and conduction of modification according to their suggestions	<i>Feedback received from partners P5, P7 and P11</i>
STEP 3	Creation of a questionnaire based on the different topics identified, which are of relevance in the international literature and for the project partners	
STEP 4	Distribution of the questionnaire among the partners	
STEP 5	Definition of the SUNRAISE research training framework (outlining issues and problems and discussing the latest international literature and possible directions of relevant PhD research)	
STEP 6	Submission for approval to the partners’ governance bodies	

Legend (level of fulfilment) Done Ongoing Pending

The status by each partner regarding the research agendas, PhD positions and passports of PhD specialisations is pointed out in the tables below:



**SUNRAISE CURRICULA AND
LEARNING CONTENTS**
Intermediate Report

Project partner: P5 (Russian State Hydrometeorological University, Russia)	
Status of the deliverables up to 28.02.2021	
1 research agenda + 1 passport of PhD specialisation + 4 PhD positions	
Activities set	Level of fulfilment
Development of institutional and departments research agendas	
Allocation of PhD positions	
Revision of "passports of PhD specialisations"	

Legend (level of fulfilment) Done Ongoing Pending

Institutional and departments research agendas developed (1)		
Title of the research agenda	Already developed?	Implemented?
PhD programme (Aspirantura) "Geoecology" (Earth sciences)	√	√

"Passports of PhD specialisations" revised (1)		
Title of the passport	Already revised?	Implemented?
PhD programme (Aspirantura) "Geoecology" (Earth sciences)	√	√

Allocation of PhD positions (4 positions)					
Name of the PhD student	Thesis topic	Year of enrolment and graduation	Supervisor(s)	Bio and academic details	Short video
Ekaterina Bulavina	Snow cover toxicity as an indicator of the ecological status of urban areas	2018 – 2022	?	X	X
Ilya Pavlov	The influence of climatic parameters of the Vologda Oblast on the transport of pollutants in the atmosphere and the deposition of pollutants in urban areas	2018 – 2022	?	X	X
Rahmatullozoda Akobirdzhon	Hydrochemical regime of rivers of South-Western Tajikistan	2017 – 2020	?	X	X
Sherali Murtazoyev	Geoecological analysis of air pollution factors in the city of Dushanbe	2018 – 2021	?	X	X

Supervisors (SUNRAISE faculty) (3)		
Name of the supervisor	Research field	Bio and academic details
Ekaterina Fertikova	Biology	√
Larisa Timofeeva	Hydrology	√
Nadezhda Sanotskaya	Water engineering	√

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**SUNRAISE CURRICULA AND
LEARNING CONTENTS**
Intermediate Report

Project partner: P6 (Siberian Federal University, Russia)							
Status of the deliverables up to 28.02.2021							
1 research agenda + 1 passport of PhD specialisation + 2 PhD positions							
Activities set			Level of fulfilment				
Development of institutional and departments research agendas							
Allocation of PhD positions							
Revision of “passports of PhD specialisations”							
Legend (level of fulfilment)							
			Done		Ongoing		Pending
Institutional and departments research agendas developed (1)							
Title of the research agenda				Already developed?	Implemented?		
PhD programme (Aspirantura) "Ecology"				✓	✓		
“Passports of PhD specialisations” revised (1)							
Title of the passport				Already revised?	Implemented?		
PhD programme (Aspirantura) "Ecology"				✓	✓		
Allocation of PhD positions (2 positions)							
Name of the PhD student	Thesis topic	Year of enrolment and graduation	Supervisor(s)	Bio and academic details	Short video		
Irina Gette	Recovery of <i>Pinus sylvestris</i> physiology following a fire	2013 – 2019	?	✓	X		
Marina Rubleva	Substance migration features in ecosystems of the mountain taiga zone	2019 – 2023	?	✓	✓		
Supervisors (SUNRAISE faculty) (2)							
Name of the supervisor	Research field			Bio and academic details			
Irina Bezkorovaynaya	Biology			✓			
Nina Pakharkova	Biology			✓			



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

Project partner: P7 (Gorno-Altai State University, Russia)					
Status of the deliverables up to 28.02.2021					
2 research agendas + 2 passports of PhD specialisation + 2 PhD positions					
Activities set			Level of fulfilment		
Development of institutional and departments research agendas					
Allocation of PhD positions					
Revision of “passports of PhD specialisations”					
Legend (level of fulfilment)					
		Done			Ongoing
					Pending
Institutional and departments research agendas developed (2)					
Title of the research agenda			Already developed?	Implemented?	
PhD programme (Aspirantura) "Ecology" (biological sciences)			✓	✓	
PhD programme (Aspirantura) "Regional Economics" (economics)			✓	✓	
“Passports of PhD specialisations” revised (2)					
Title of the passport			Already revised?	Implemented?	
PhD programme (Aspirantura) "Ecology" (biological sciences)			✓	✓	
PhD programme (Aspirantura) "Regional Economics" (economics)			✓	✓	
Allocation of PhD positions (2 positions)					
Name of the PhD student	Thesis topic	Year of enrolment and graduation	Supervisor(s)	Bio and academic details	Short video
Olesia Orlova	Sustainable Regional Economic Development Based on the Transition to the Model of Green Economy (Based on the Example of the Altai Republic)	2017 – ?	Prof. Dr. Andrei V. Glotko	✓	✗
Svetlana Kazantseva	Spatial and Ecological Structure of Mayfly (Ephemeroptera) Population in Water Bodies of Altai Mountains	2020 – ?	Prof. Piotr Yu. Malkov	✓	✓
Supervisors (SUNRAISE faculty) (2)					
Name of the supervisor	Research field			Bio and academic details	
Mariia Sukhova	Geographical Sciences			✓	
Olga Zhuravleva	Geographical Sciences			✓	

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**SUNRAISE CURRICULA AND
LEARNING CONTENTS**
Intermediate Report

Project partner: P9 (Royal University of Bhutan, Bhutan)

Status of the deliverables up to 28.02.2021

research agendas

Activities set

Level of fulfilment

Development of institutional and departments research agendas

Allocation of PhD positions

Revision of “passports of PhD specialisations”

Not applicable^A

Not applicable^A

Legend (level of fulfilment)

Done

Ongoing

Pending

Institutional and departments research agendas developed (?)

Title of the research agenda

Already developed?

Implemented?

Supervisors (SUNRAISE faculty) (?)

Name of the supervisor

Research field

Bio and academic details

^A Due to the inexistence of a PhD programme in partner P9's institution and the impossibility to create it given administrative issues, partner P9 has reported that no PhD positions can be allocated on the topics of the project. The revision of “passports of PhD specialisations” is only planned for Russian academic partners.



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

Project partner: P11 (Kumaun University, India)	
Status of the deliverables up to 28.02.2021	
1 research agendas + 10 PhD positions	
Activities set	Level of fulfilment
Development of institutional and departments research agendas	
Allocation of PhD positions	
Revision of "passports of PhD specialisations"	<i>Not applicable</i> ^A

Legend (level of fulfilment) Done Ongoing Pending

Institutional and departments research agendas developed (1)		
Title of the research agenda	Already developed?	Implemented?
PhD Programme "Geography"; including the following research areas ^B : <ul style="list-style-type: none"> - Application of Remote Sensing and GIS - Mountains Climate Change Impact and Adaptation - Natural Hazards Management and Disaster Risk Reduction - Sustainable Mountain Urbanisation - Sustainable Tourism Development 	✓	✓

Allocation of PhD positions (10 positions)					
Name of the PhD student	Thesis topic	Year of enrolment and graduation	Supervisor(s)	Bio and academic details	Short video
Arifa Begum	A Geographical Study of Urban Growth and Quality of Life in the Himalayan Foothills of Kumaun	2018 – 2022-23	Prof. P. C. Tiwari and Dr. Sandeep Maithani	✓	✓
Dheeraj Pant	Climate Change and its Impact on Community Health in Betalghat Development Block, Kumaon Lesser Himalaya	2017 – 2022-23	Prof. P. C. Tiwari	✓	✓
Kevala Nand	Impact of Climate Change on Water Resources in Kujgad Watershed, Kumaun Himalaya	2017 – 2022-23	Prof. P. C. Tiwari	✓	✓
Manika Kweera	Sustainable Urban Development under Climate Change in the Lake Region of District Nainital, Uttarakhand [Proposed]	2020 – ?	Prof. P. C. Tiwari	✓	✓
Manisha Pant	Climate Change and its Impact on Human Health in Mountainous and Foothill Regions of District Nainital, Uttarakhand	2018 – 2022-23	Prof. P. C. Tiwari	✓	X
Mohan Singh	Impacts OF Climate Change on Agriculture, Food Security and Rural Health in Balia Catchment, Kumaon Himalaya [Ph.D. Dissertation Submitted]	2014 – 2020	Dr. Bhagwati Joshi	✓	X

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**SUNRAISE CURRICULA AND
LEARNING CONTENTS**
Intermediate Report

Pooja Nainwal	Women's Perception, Responses and Adaptation to Climate Change in Ramgad Watershed, Kumaun Himalaya, Uttarakhand	2018 – 2022-23	Prof. P. C. Tiwari	✓	✓
Rahul Kumar	Impact of Climate Changes on Farming System and Food Security in Kujgad Watershed, Kumaon Himalaya	2020 – ?	Prof. P. C. Tiwari	✓	✓
Ritika Vishnoi	Changes in Rainfall Pattern and its Impact on Food Security status in Ramgad Catchment of Kumaun Himalaya: A Community based Adaptation Strategy	2013 – 2020-21	Prof. P. C. Tiwari	✓	✓
Vaseem Ahmad	Impact Of Climate Change on Water Resources: A Case Study of Balia Catchment, District Nainital, Uttarakhand	2017 – 2022-23	Dr. Bhagwati Joshi	✓	X

Supervisors (SUNRAISE faculty) (2)		
Name of the supervisor	Research field	Bio and academic details
Bhagwati Joshi	Geography	✓
Prakash C. Tiwari	Geography	✓

^A The revision of “passports of PhD specialisations” is only planned for Russian academic partners.

^B Note: As per the University Rule it is not allowed to fix an agenda for Ph.D. research. However, based on the recommendations of the Workshop organized at Kumaun University (Nainital) on May 2018 we have suggested the Departmental Faculty Members to focus on the research agenda mentioned above both for Ph.D. Research and Dissertations at Master's Level. The majority of Ph.D. Researches as well as Master's Dissertation are focussing broadly on the areas mentioned in the Table above. This is endorsed by the Ph.D. Research title of the 6 Ph.D. Students in the Table below.



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

Project partner: P12 (Jawaharlal Nehru University, India)	
Status of the deliverables up to 28.02.2021	
1 research agendas + 6 PhD positions	
Activities set	Level of fulfilment
Development of institutional and departments research agendas	
Allocation of PhD positions	
Revision of "passports of PhD specialisations"	<i>Not applicable</i> ^A

Legend (level of fulfilment) Done Ongoing Pending

Institutional and departments research agendas developed (1)		
Title of the research agenda	Already developed?	Implemented?
PhD Programme "Environmental sciences "; including the following research areas: <ul style="list-style-type: none"> - Ecosystem Services in Western Himalayan Eco region - Fire Ecology in Tropical forest - Road Ecology in Himalayan foothills - Vulnerability Assessment in Western Himalayan Eco region 	√	√

Allocation of PhD positions (6 positions)					
Name of the PhD student	Thesis topic	Year of enrolment and graduation	Supervisor(s)	Bio and academic details	Short video
Anees MM	Characterising urban ecosystems in the capital cities of the Western Himalaya	2018 – ?	Prof. P.K. Joshi	√	√
Deepika Mann	Spatio-temporal analysis of effects of road network in Central Himalayan region	2018 – ?	Dr. Shalini Rankavat and Prof. P.K. Joshi	√	√
Neha Chauhan	Socio-environmental vulnerability of agricultural communities to climate change in Western Himalaya	2019 – ?	Prof. P.K. Joshi and Prof. Dr. Henrik von Wehrden	√	√
Praveen Kumar	Assessing climate change vulnerability and adaptation strategies of socio-ecological systems in the Central Himalaya	2018 – ?	Prof. P.K. Joshi	√	√
Saurabh Kaushik	Understanding eastern Himalaya cryosphere using remote sensing	2018 – ?	Prof. P.K. Joshi and Dr. Tejpal Singh	√	√
Sonali Sharma	Regulating ecosystem services in urbanising landscapes of Western Himalaya	2020 – ?	Prof. P.K. Joshi	√	√

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**SUNRAISE CURRICULA AND
LEARNING CONTENTS**
Intermediate Report

Supervisors (SUNRAISE faculty) (4)		
Name of the supervisor	Research field	Bio and academic details
Deep N Pandey	Political geography	✓
Jayant K Tripathi	Environmental sciences	✓
Pawan K. Joshi	Environmental sciences	✓
Satish C Garkoti	Botany	✓

^A The revision of “passports of PhD specialisations” is only planned for Russian academic partners.



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

- **WP2.3:** two open call international summer schools have been successfully conducted in summer 2018 and 2019, respectively, and work has already started for the organisation of the third international SUNRAISE summer school, which was scheduled for summer 2020, but will be held in summer 2021, due to the covid-19 situation in 2020, which is severely constraining the carrying out of international events worldwide. Additionally, 13 onsite seminars and several short study visits have been carried out.

Open call international summer schools				
Status of the deliverables up to 28.02.2021				
2 summer schools conducted + 1 third summer school planned				
Title of the summer school	Organiser(s)	Date	Number of participants	Quality assessment
Monitoring and Early Warnings in Mountain Social-Ecological Systems	P6 (Siberian Federal University, Russia) and P7 (Gorno-Altai State University, Russia)	15-29 July 2018	47	√ done
Sustainable Natural Resource Use in Arctic and High Mountainous Areas	P2 (University of Salzburg, Austria)	07-21 July 2019	78	√ done
ACT! Arctic Sustainability: Policy and Management Innovations for Transboundary Problems	P5 (Russian State Hydrometeorological University, Russia)	Scheduled for 17-28 August 2020 but postponed due to the covid-19 situation to August 2021	-	-



Summer school 2018 in Krasnoyarsk and Gorno-Altai (1)

SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report



Summer school 2018 in Krasnoyarsk and Gorno-Altai (2)



Summer school 2019 in Salzburg

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

Onsite seminars			
Status of the deliverables up to 28.02.2021			
9 onsite seminars			
Title of the seminar	Organiser(s)	Date	Number of participants
SUNRAISE Russia's Start-up Seminar and stakeholder workshop	P5 (Russian State Hydrometeorological University, Russia)	12-13 March 2018	28
Stakeholder Seminar for Faculty, Researchers, Local Level Policy Makers and for Ph.D. Students	P11 (Kumaun University, India)	17 November 2018	-
Stakeholder Seminar for Faculty, Researchers, Local Level Policy Makers, and for Ph.D. Students	P11 (Kumaun University, India)	27-28 June 2019	-
Joint Seminar of ERASMUS+ CBHE Projects	P3 (Estonian University of Life Sciences, Estonia)	20-24 May 2019	38
Workshop on Google Earth Engine (GEE) for Beginners	P12 (Jawaharlal Nehru University, India)	07 August 2019	52
On Site Orientation Seminar for Ph.D. Students	P11 (Kumaun University, India)	August 2019	-
Workshop on Heritage Conservation & Management	P12 (Jawaharlal Nehru University, India)	02 September 2019	20
On Site Orientation Seminar for Ph.D. Students in Rudrapur	P11 (Kumaun University, India)	September 2019	-
Seminar for Faculty, Researchers, and for Ph.D. Students	P11 (Kumaun University, India)	10 October 2019	-
Development of Massive Open Online Courses in Order to Promote Sustainable Development of Arctic and High Mountainous Areas	P7 (Gorno-Altai State University, Russia)	27 November 2019	20
SUNRAISE project seminar «Sustainable Natural Resource Use in Arctic and High Mountainous Areas»	P6 (Siberian Federal University, Russia)	29-31 January 2020	17
Winter School on Q-GIS	P12 (Jawaharlal Nehru University, India)	3-7 February 2020	15
Winter School on SAGA GIS	P12 (Jawaharlal Nehru University, India)	10-14 February 2020	15

05. Results

The fulfilment of the project activities within work package 2 has led to a substantial improvement of the teaching programmes and research agendas in the involved project partners' institutions and has served as an exceptional platform for the exchange of ideas among students and investigators from institutions from very different socio-ecological contexts.

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



SUNRAISE CURRICULA AND LEARNING CONTENTS

Intermediate Report

All teaching programmes targeted and requiring improvements have been updated. On 28.02.2021, a total of 35 ECTS have been revised and 39 ECTS newly created, which surpasses the objective of approximately 12 revised and 30 new ECTS established during the conception of the project. All concerned project partners have already uploaded the new syllabus and learning materials, accredited the updated/ new courses, and started with their implementation. The number of credits in every course have turned out to be appropriate in all cases, as well as the position of the courses in curricula. Strategies for improvement during the quality assessment concern specially the practical and self-learning approach in some courses, which is being discussed right now. Results on the revised/ new courses are made available in the SUNRAISE webpage: <http://sunraise.sfu-kras.ru/sunraiser>.

On the other hand, altogether, 6 institutional and departments research agendas have been developed at Russian, Indian and Bhutanese partners' higher education institutions (see: <http://sunraise.sfu-kras.ru/node/99>), 13 staff members designated as SUNRAISE faculty (see: <http://sunraise.sfu-kras.ru/community/faculty>), and 24 PhD positions allocated (see: http://sunraise.sfu-kras.ru/results/PhD_students), which surpasses again the objective of at least 7 PhD positions. Russian partners P5, P6 and P7 have additionally updated 4 passports of PhD specialisations. The creation of the SUNRAISE research training framework is, additionally, also underway and a the first draft will be released before long. The fact that it is still under construction is due to unexpected circumstances that are not in the responsibility of the project partner and that will be solved very soon.

The development of all activities within sub-package 2.3, including the summer schools and onsite seminars, resulted in a very satisfactory experience and very enriching learning process for all participants. During the summer schools, the inclusion of local stakeholders and international professionals from within and outside the consortium and with very different experiences made the discussions very enriching and exciting for all attendees. A wide range of theoretical concepts and practical knowledge was shared among all participants, which is becoming crucial for the successful development of the project and being very enriching for all participating partners and institutions in order to better support the sustainable development of mountain and arctic environments. In order to keep all interested people informed on these events, results and agenda have been uploaded on the SUNRAISE webpage: <http://sunraise.sfu-kras.ru/activities>.