



## Sustainable technologies for low- and medium income countries TN0354, 10253.2021

7.5 Hp

Pace of study = 25%

Education cycle = Advanced

Course leader = Evgheni Ermolaev

### Evaluation report

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**Evaluation period: 2021-01-07 - 2021-01-31**

Answers 5

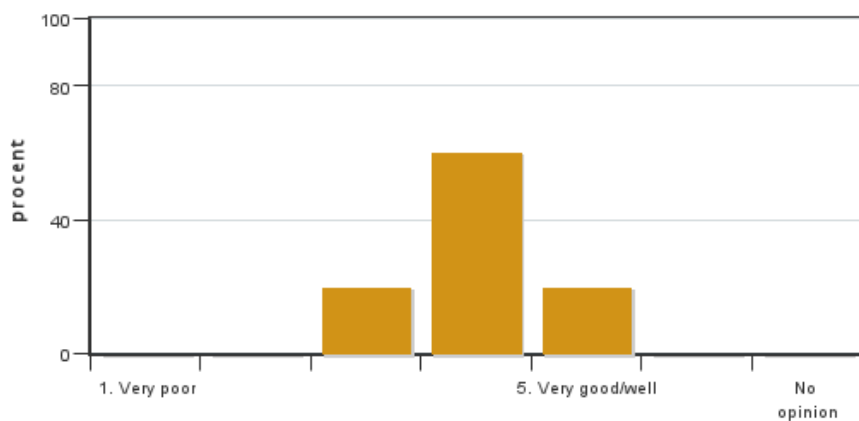
Number of students 10

Answer frequency 50 %

### Mandatory standard questions

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#### 1. My overall impression of the course is:

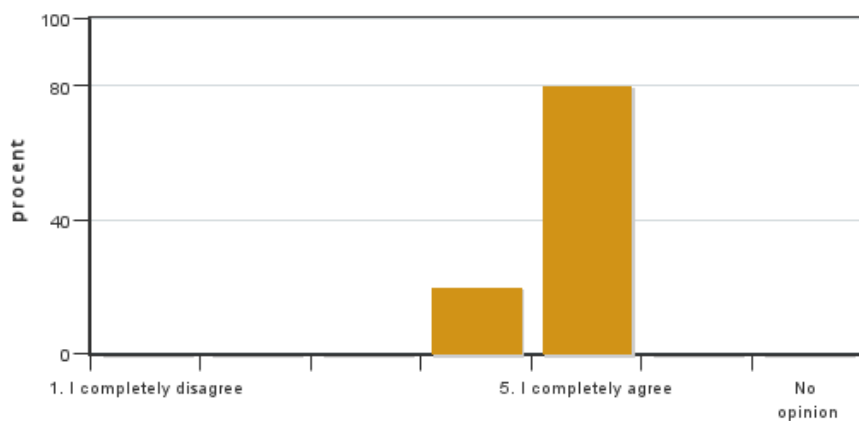


Answers: 5  
Medel: 4,0  
Median: 4

1: 0  
2: 0  
3: 1  
4: 3  
5: 1

No opinion: 0

#### 2. I found the course content to have clear links to the learning objectives of the course.



Answers: 5  
Medel: 4,8  
Median: 5

1: 0  
2: 0  
3: 0  
4: 1  
5: 4

No opinion: 0

**3. My prior knowledge was sufficient for me to benefit from the course.**

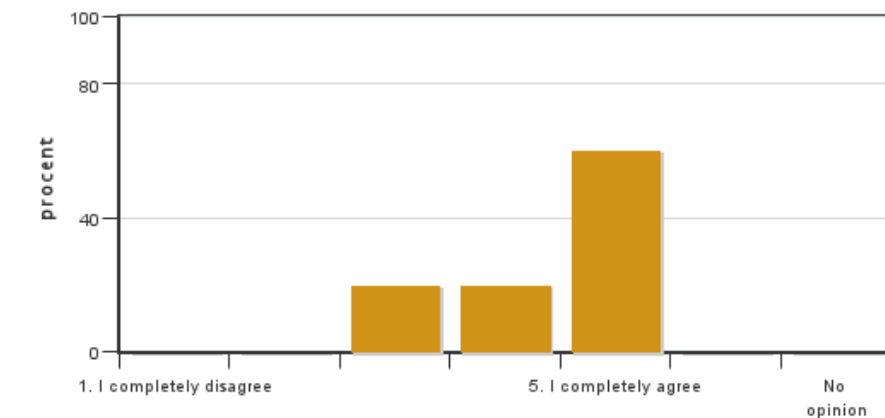


Answers: 5  
Medel: 5,0  
Median: 5

1: 0  
2: 0  
3: 0  
4: 0  
5: 5

No opinion: 0

**4. The information about the course was easily accessible.**

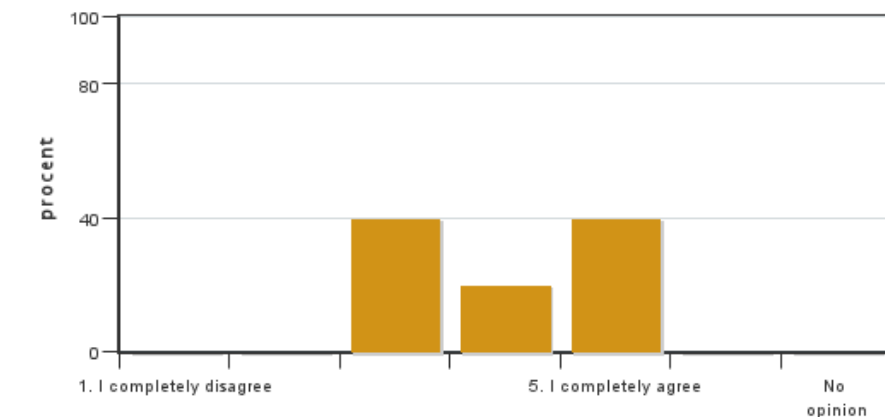


Answers: 5  
Medel: 4,4  
Median: 5

1: 0  
2: 0  
3: 1  
4: 1  
5: 3

No opinion: 0

**5. The various course components (lectures, course literature, exercises etc.) have supported my learning.**



Answers: 5  
Medel: 4,0  
Median: 4

1: 0  
2: 0  
3: 2  
4: 1  
5: 2

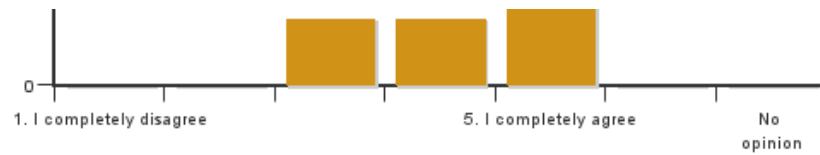
No opinion: 0

**6. The social learning environment has been inclusive, respecting differences of opinion.**



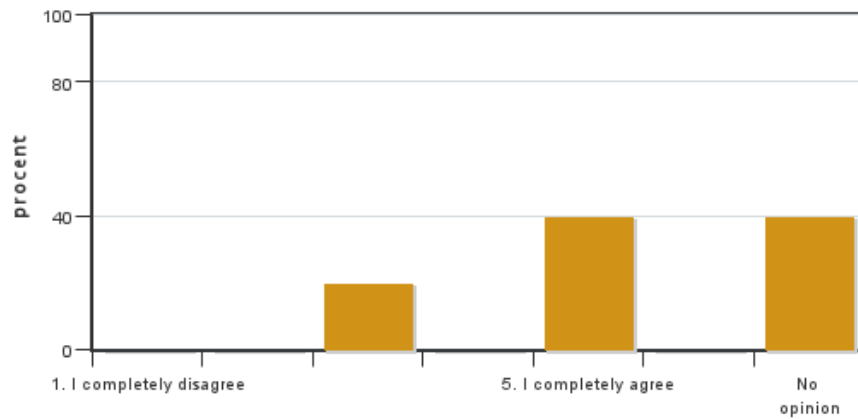
Answers: 5  
Medel: 4,4  
Median: 5

1: 0  
2: 0  
3: 1  
4: 1  
5: 3



No opinion: 0

**7. The physical learning environment (facilities, equipment etc.) has been satisfactory.**



Answers: 5

Medel: 4,3

Median: 5

1: 0

2: 0

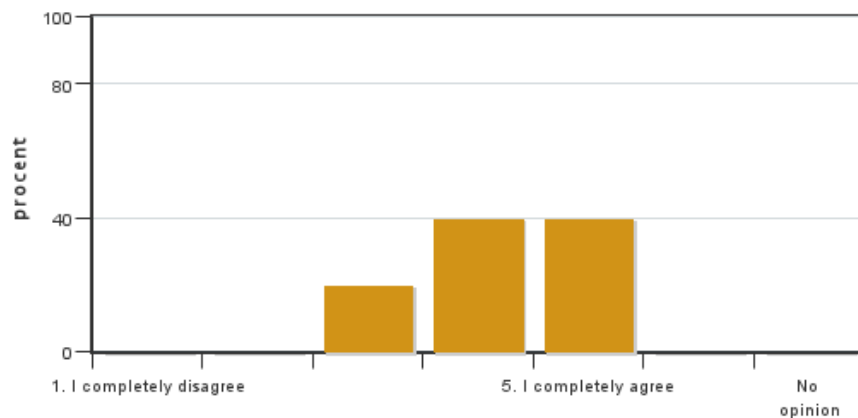
3: 1

4: 0

5: 2

No opinion: 2

**8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).**



Answers: 5

Medel: 4,2

Median: 4

1: 0

2: 0

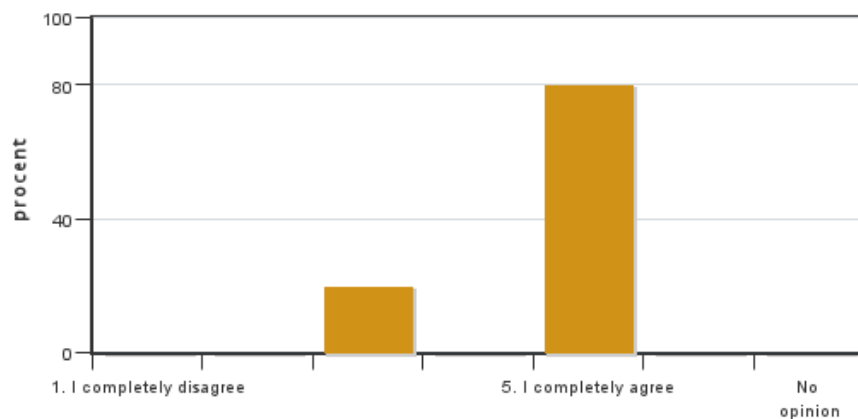
3: 1

4: 2

5: 2

No opinion: 0

**9. The course covered the sustainable development aspect (environmental, social and/or financial sustainability).**



Answers: 5

Medel: 4,6

Median: 5

1: 0

2: 0

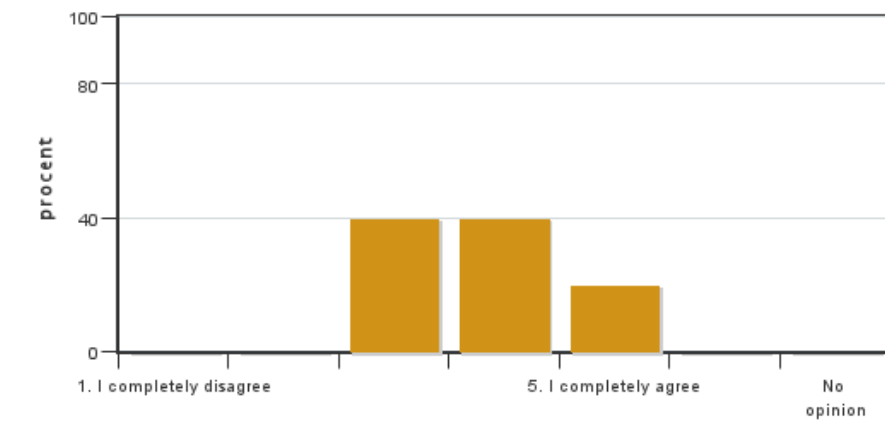
3: 1

4: 0

5: 4

No opinion: 0

**10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).**

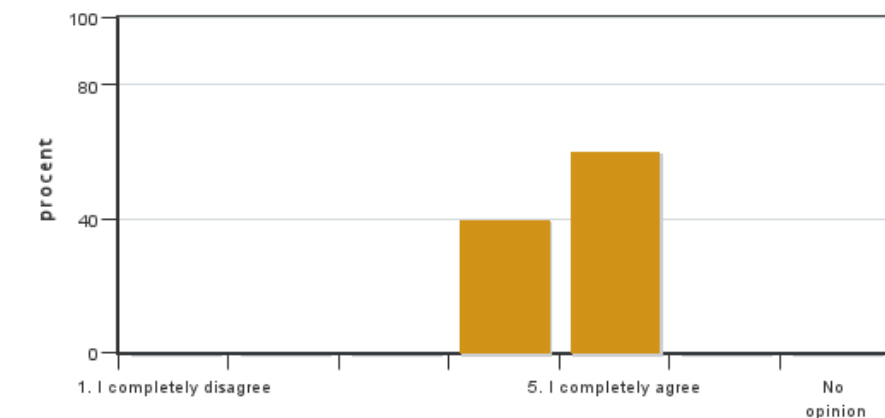


Answers: 5  
Medel: 3,8  
Median: 4

1: 0  
2: 0  
3: 2  
4: 2  
5: 1

No opinion: 0

**11. The course covered international perspectives.**

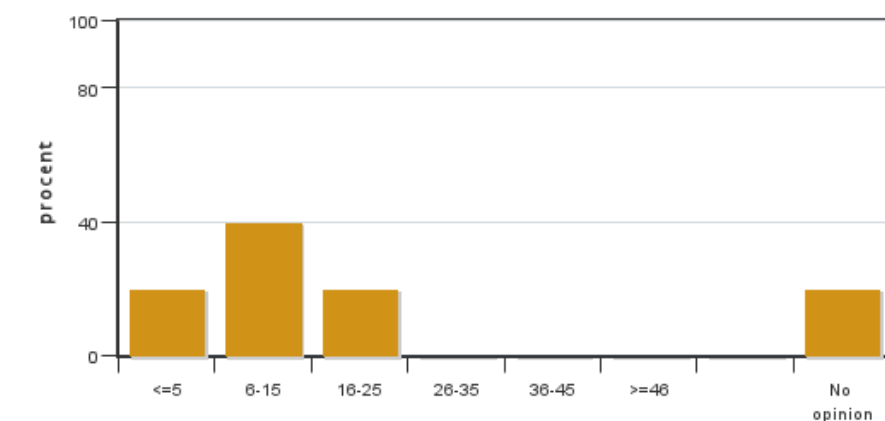


Answers: 5  
Medel: 4,6  
Median: 5

1: 0  
2: 0  
3: 0  
4: 2  
5: 3

No opinion: 0

**12. On average, I have spent ... hours/week on the course (including timetabled hours).**

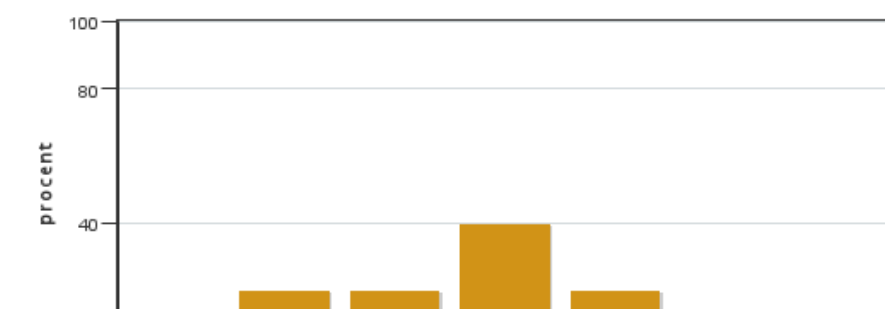


Answers: 5  
Medel: 10,6  
Median: 6-15

≤5: 1  
6-15: 2  
16-25: 1  
26-35: 0  
36-45: 0  
≥46: 0

No opinion: 1

**13. If relevant, what is your overall experience of participating in all or part of your course online?**



Answers: 5  
Medel: 3,6  
Median: 4

1: 0  
2: 1  
3: 1  
4: 2  
5: 1

No opinion: 0

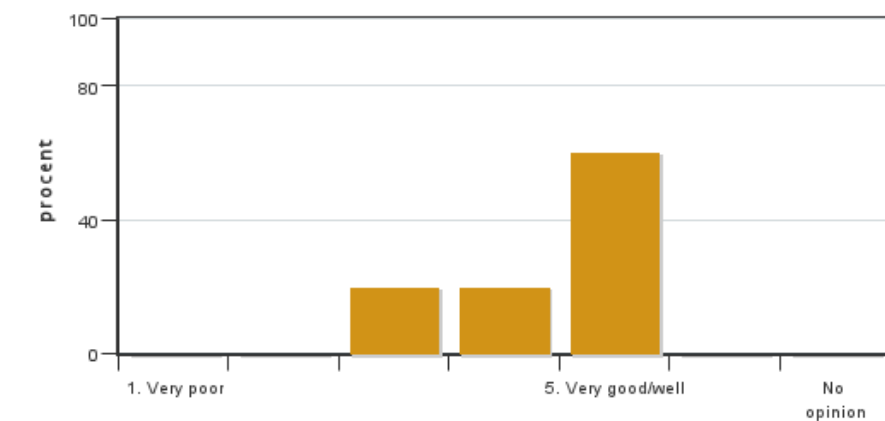


14. If relevant, please share what worked well when participating in teaching on distance

15. If relevant, please share what worked less well when participating in teaching on distance

## Additional own questions

16. Please rate how well (with accordance to course syllabus) was the module "Introduction to sustainable development in low- and medium income countries" presented through seminars, assignments, exercises and other relevant course activities.

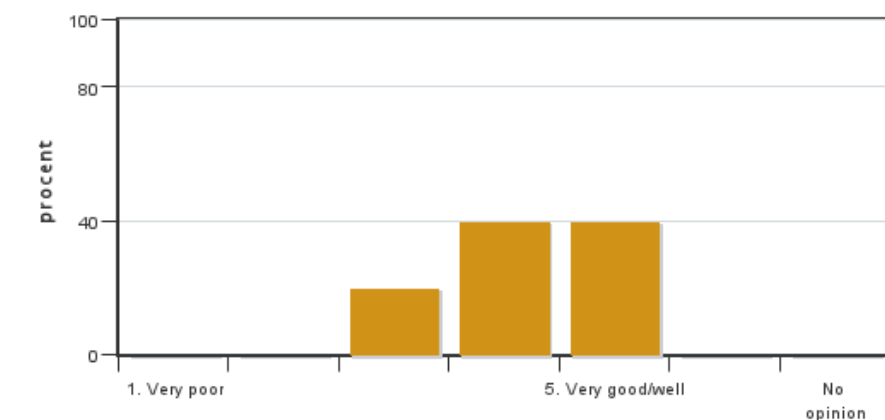


Answers: 5  
Medel: 4,4  
Median: 5

1: 0  
2: 0  
3: 1  
4: 1  
5: 3

No opinion: 0

17. Please rate how well (with accordance to course syllabus) was the module "Sustainable resource management: water, nutrients and waste" presented through seminars, assignments, exercises and other relevant course activities.

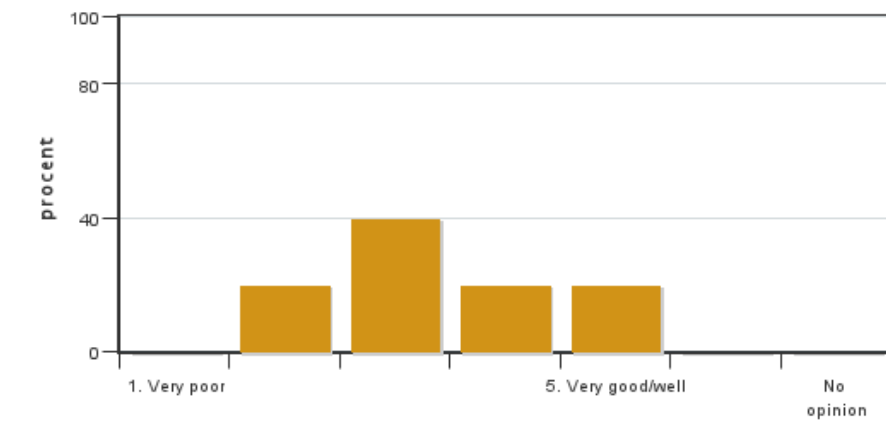


Answers: 5  
Medel: 4,2  
Median: 4

1: 0  
2: 0  
3: 1  
4: 2  
5: 2

No opinion: 0

18. Please rate how well (with accordance to course syllabus) was the module "Small-scale renewable energy technologies" presented through seminars, assignments, exercises and other relevant course activities.

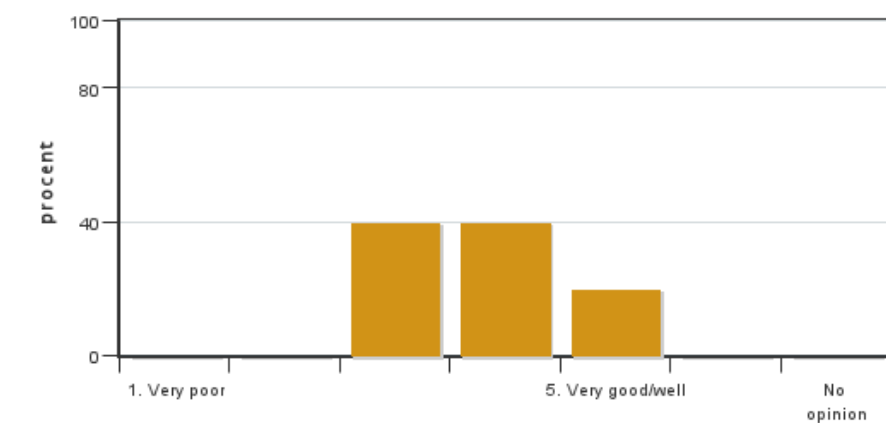


Answers: 5  
Medel: 3,4  
Median: 3

1: 0  
2: 1  
3: 2  
4: 1  
5: 1

No opinion: 0

**19. Please rate how well (with accordance to course syllabus) was the module "Small-scale transport technologies, logistics and value chain management" presented through seminars, assignments, exercises and other relevant course activities.**

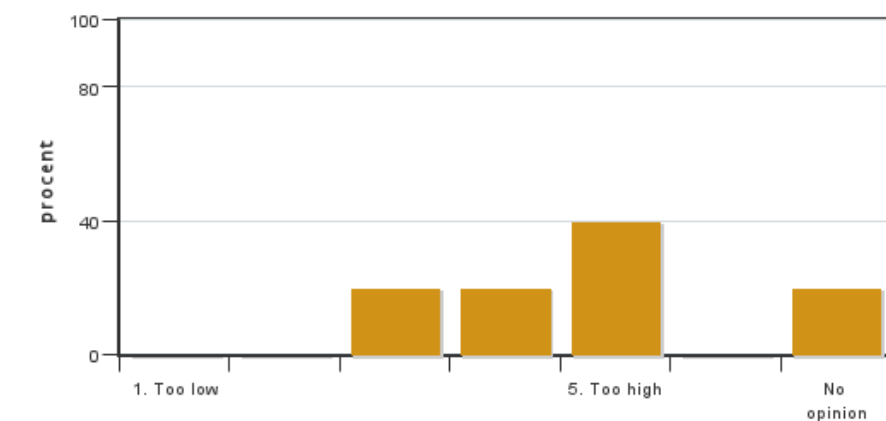


Answers: 5  
Medel: 3,8  
Median: 4

1: 0  
2: 0  
3: 2  
4: 2  
5: 1

No opinion: 0

**20. What was the level of involvement of your group colleagues during the project work? (If the answer is "1" or "2", please also notify the teacher by e-mail)**

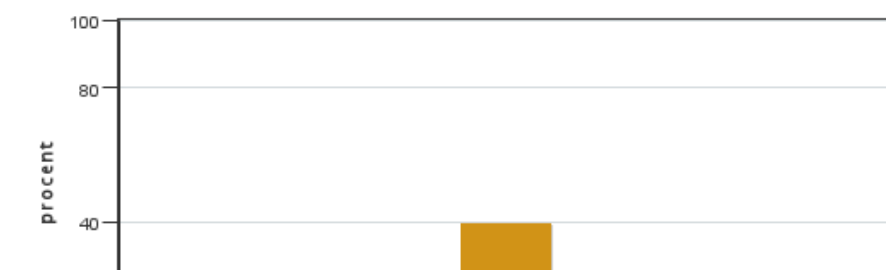


Answers: 5  
Medel: 4,3  
Median: 4.5

1: 0  
2: 0  
3: 1  
4: 1  
5: 2

No opinion: 1

**21. Do you feel that the project work was well arranged and you have received the necessary support to successfully complete it?**



Answers: 5  
Medel: 4,0  
Median: 4

1: 0  
2: 0  
3: 1  
4: 2  
5: 1



No opinion: 1

## Course leaders comments

The course evaluation was performed by 5 students. Out of 10 registered students, 7 actively participated in the entire course. This means that the actual evaluation answer frequency was 71% of students that participated in the course.

The overall course evaluation was very positive and students were generally satisfied with the course structure, work load and the flipped classroom format, although several comments noted that not every lecture followed this format and even more interactivity would be beneficial for the course in the future. Several comments positively highlighted my own efforts in preparing interactive seminars and ensuring that reading and preparation assignments would be available before each seminar. I really appreciate the positive feedback! There is always some room for improvement, however, and as it was noted by a few, the zoom links and assignments were sometimes hard to find. This is something that can be improved in the future. There were some comments mentioning the pre-seminar literature not being relevant to the seminar, and although it is always up to the individual lecturers to design their seminars, I will pass on this comment to the lecturers to keep in mind for the future course instances. More feedback that will definitely be integrated in the future is to broaden the focus and bring in examples on more low- and middle income countries, and to update some lectures materials with newer information.

This course occasion was performed in an unusual time, shifting almost the entirety of the course to distance learning, and that of course brings its own limitations. The majority of students, however felt that the learning worked really well, with some exceptions where it was difficult to understand the lecturer or where the interactivity of the lecture was less than desired. Such feedback is crucial for the future and will be forwarded to the teachers in the course.

The practical exercises were highly appreciated, but a suggestion was made to integrate the calculation exercises into the lectures and to do more calculations that will be useful during the project work. The reflections on project work suggest that it was very interesting and a good learning experience. Some improvements suggestions included providing more detailed structure for the project draft, supplying more detailed background information for the case study and designing the project work for a tighter interaction between the different groups. We, in the course team, really appreciate the positive feedback and the constructive criticism which will help is to make some improvements to the project work in the future.

One comment suggested further expanding the gender equality perspective in the course and another one indicated that the students background should not play a role in the evaluation. We, in the course team, fully agree with that and will continue our work towards integrating all aspects of equality into future course instances. Additionally, it is always crucial to inform the course team directly if any feeling of unequal treatment arises, so that the issue could be addressed and amended directly. The gender proportion among the teachers in the course represented a balance of genders within the relevant subjects at the department. Of the 8 lecturers teaching in the course, 5 were men and 3 were women.

The comments by the student representative generally summarise the student comments well, I would like to thank the representative and the students participating in the course for their interest, engagement and dedication!

Best regards,  
Evgheni Ermolaev  
Course Leader

## Student representatives comments

- + Well-structured course, good organisation and support
- + Milling exercise was great
- + Many lectures were very interactive, engaging
- + Most people liked the project work as a group and the discussions around it
- + Good support during the project: nice to hand in different versions and getting feedback and support throughout

- Good to read papers in advance, but they should be more integrated into discussions in the lecture
- Some lectures were rather basic  
=> it's a master level course and some preliminary knowledge shall be expected
- Some students had difficulties to follow long lectures online, less discussions and questions in some lectures
- Some lectures were hard to understand and long
- Lacking information on the village made the project work a bit difficult

Suggestions for improvement:

- Higher focus on discussion than on information
- Data presented in some lectures was old: information and statistics should be updated
- More focus on sustainability of different approaches
- There was a high focus on Africa, it would be nice to also include more lectures/ aspects on other low- and medium income countries in Asia or Latin America
- Balance the time needed for preparation of some lectures
- Put more emphasis on gender aspects
- More exercises involved with the lectures  
=> also specific exercises that facilitate the project work