

Reaching citizens, policy-makers and researchers through Massive Open Online Courses (MOOCs) on Climate Change and Health

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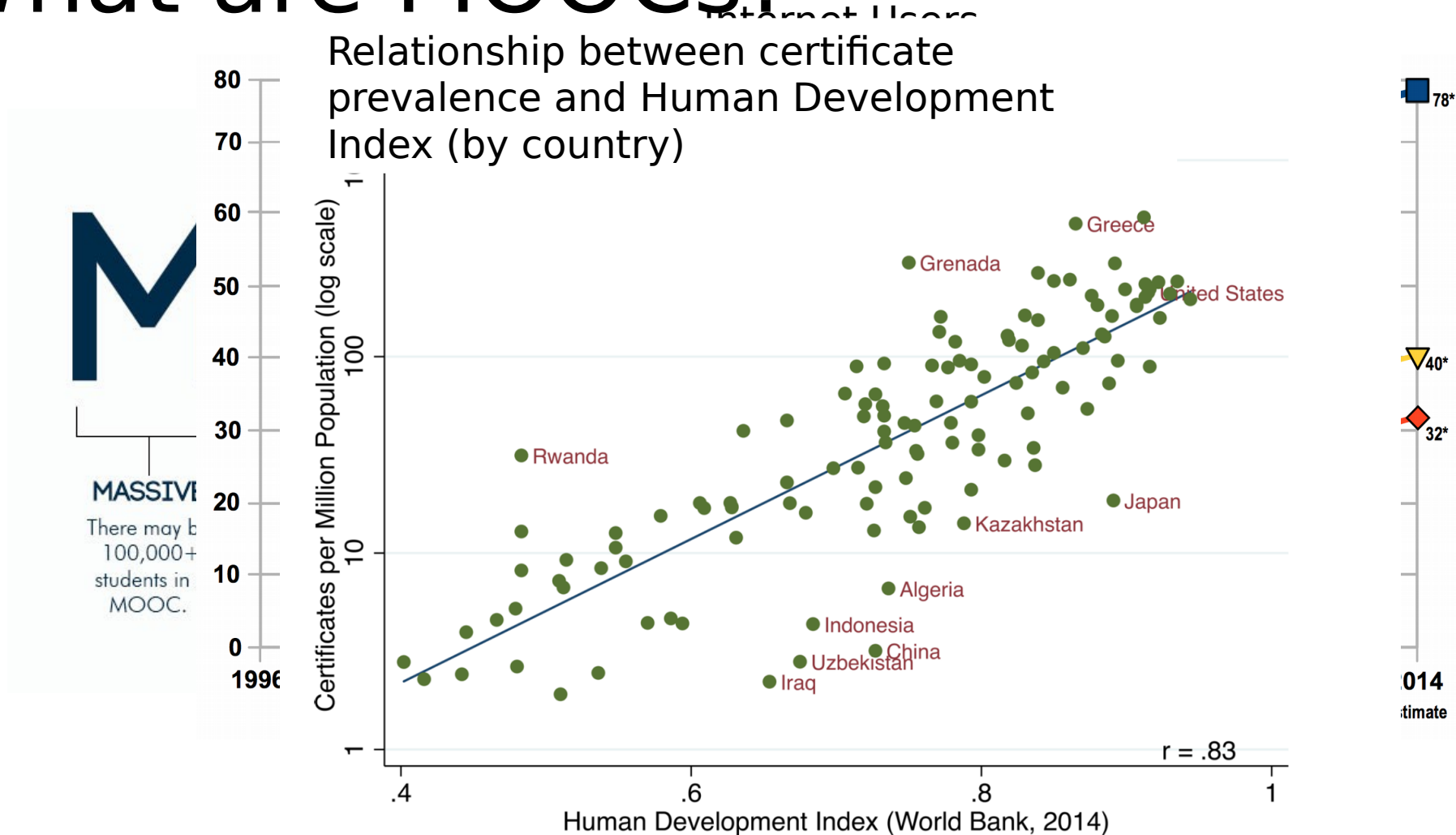
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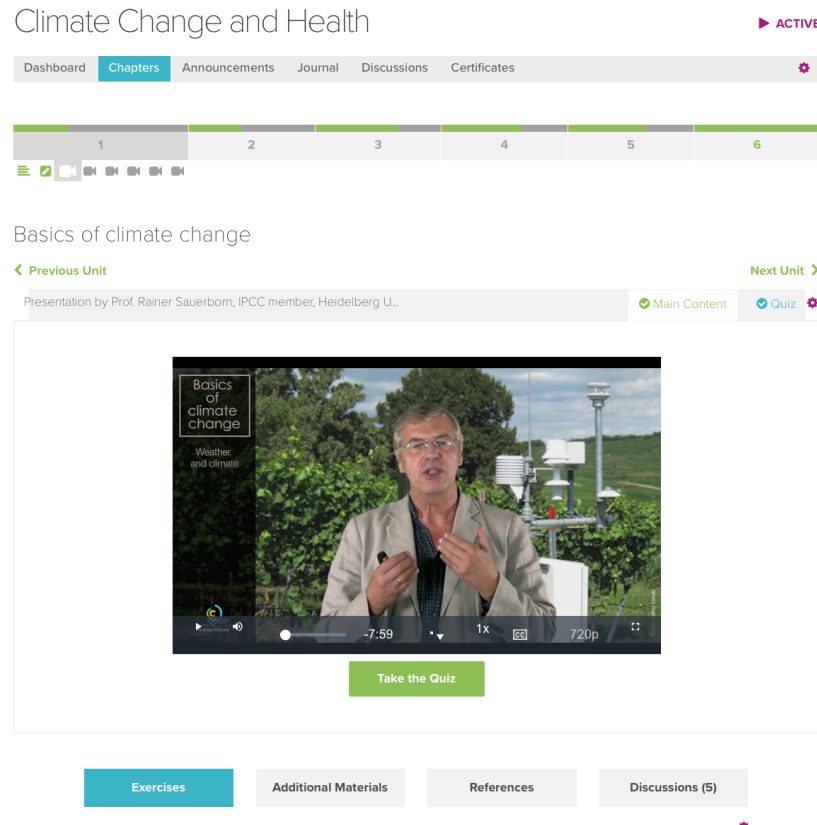
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What are MOOCs?



Climate Change and Health



German platform iversity
<https://iversity.org/en/courses/climate-change-and-health>

- **Who?** general public from all parts of the world
- **What needed?** knowledge of English
- **What will be learned?**
 - Nature of health impacts worldwide
 - Best practices in adoption strategies and promotion in health co-benefits
 - Analysis of your country as case study, develop understanding of your own country's climate adaptation plan
- **Interaction?**
 - quizzes
 - Discussion forums for specific interest groups (i.e. child-malnutrition from climate change, health effects for elderly)
 - Live Google Hangouts on YouTube
 - Personal email feedback
- **Prizes:** best three course participants have course fee waved for presence course (3 ECTS)

Climate Change and Health for Policy-Makers

Climate Change & Health for Policy-Makers FINISHED

Dashboard **Chapters** Announcements Discussions Certificates

1	2	3	4	5	6
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Presentation by Prof. Rainer Sauerborn, IPCC member, Heidelberg University (Germany)

[Previous Unit](#) [Next Unit](#)

Argument 1. Health as a motivator [Main Content](#)

Health as a positive leverage for climate policy

Protecting health: the most important motivation

For people to act against climate change

Open this page in a new tab

- Developed by 4 scientist of 5th Assessment report of the Intergovernmental Panel on Climate Change (IPCC)
- **Who?** tailored for senior policy-makers and negotiators of climate agreements (COP21 – United Nations Climate Change conference)
- **What needed?** familiarity with essentials of climate systems, current debate on mitigation and adaptation policies
- **What will be learned?**
 - Why health is a key argument in developing climate policy
 - scientific evidence behind key climate policy arguments based on human health

German platform iversity

<https://iversity.org/en/courses/climate-change-health-for-policy-makers>

Interaction: quizzes, discussion forums, weekly Google Hangouts on YouTube

Francophone MOOC: Changement climatique et santé en contexte africain

The screenshot shows the FUN-MOOC USPC interface. At the top, there's a navigation bar with the FUN-MOOC logo and the course title 'USPC Changement climatique et santé en contexte africain'. Below this, there's a search bar and a user profile dropdown for 'Sandra Bartelt'. The main content area is divided into a sidebar and a main panel. The sidebar contains a 'Courseware' tab and a list of course units. The main panel displays a video player with the title 'VIDÉO : ÉPIDÉMIOLOGIE DES MALADIES INFECTIEUSES ET LIEN AVEC L'ENVIRONNEMENT, DR. ALI SIÉ'. The video player shows a man sitting at a desk with a laptop, and a text overlay on the right side of the video reads: 'Introduction', 'Impact du climat et de l'environnement sur les maladies infectieuses', and 'système complexe, dynamique, fonctionnel'. Below the video player, there's a download link for the video in different qualities: 'Haute (1080p) / Normale (720p) / Mobile (480p)'. At the bottom, there's a quiz section titled 'QUIZZ (1 point possible)'.

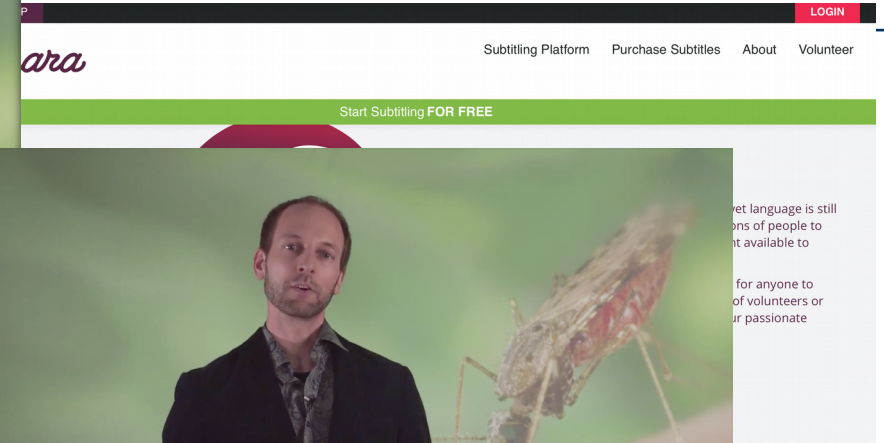
- **Who?** general public from all parts of the world
- **What needed?** knowledge of French
- **What will be learned?**
 - Nature of health impacts of climate change in Africa
 - Answers and strategies of adaptation
 - Tools to assess, prevent and adapt to different health impacts on climate change
- **Interaction?**
 - quizzes
 - discussion forums

French platform FUN-MOOC
<https://www.fun-mooc.fr/courses/USPC/37006/session01>

Different MOOCs for different audiences

#	Audience	Wk	Lecturer profile	Geo-focus	Language of speaker	Launch date (online)	Basis
1	High-level policy-makers (e.g. COP21)	2 days	Int'l experts, seniors+	global	English*	10/2015	3 IPCC chapter health authors
2	General public	5	Int'l experts	global	English*	Online 2-3/2016	Presence courses in HD, Since 2010
3	African, francophone general public	5	African experts for Africans	Sub-Saharan Africa	French, Engl. subtitles	April 2017 online	Presence course in Burkina Faso Since 2013
4	Researchers: Doctoral, post docs etc.	7	Scientists Method gurus	global	English*	12/2018	Current research at all consortium partners

*Subtitles in Mandarin, Hindi, Arabic, Indonesian, Spanish, Portuguese

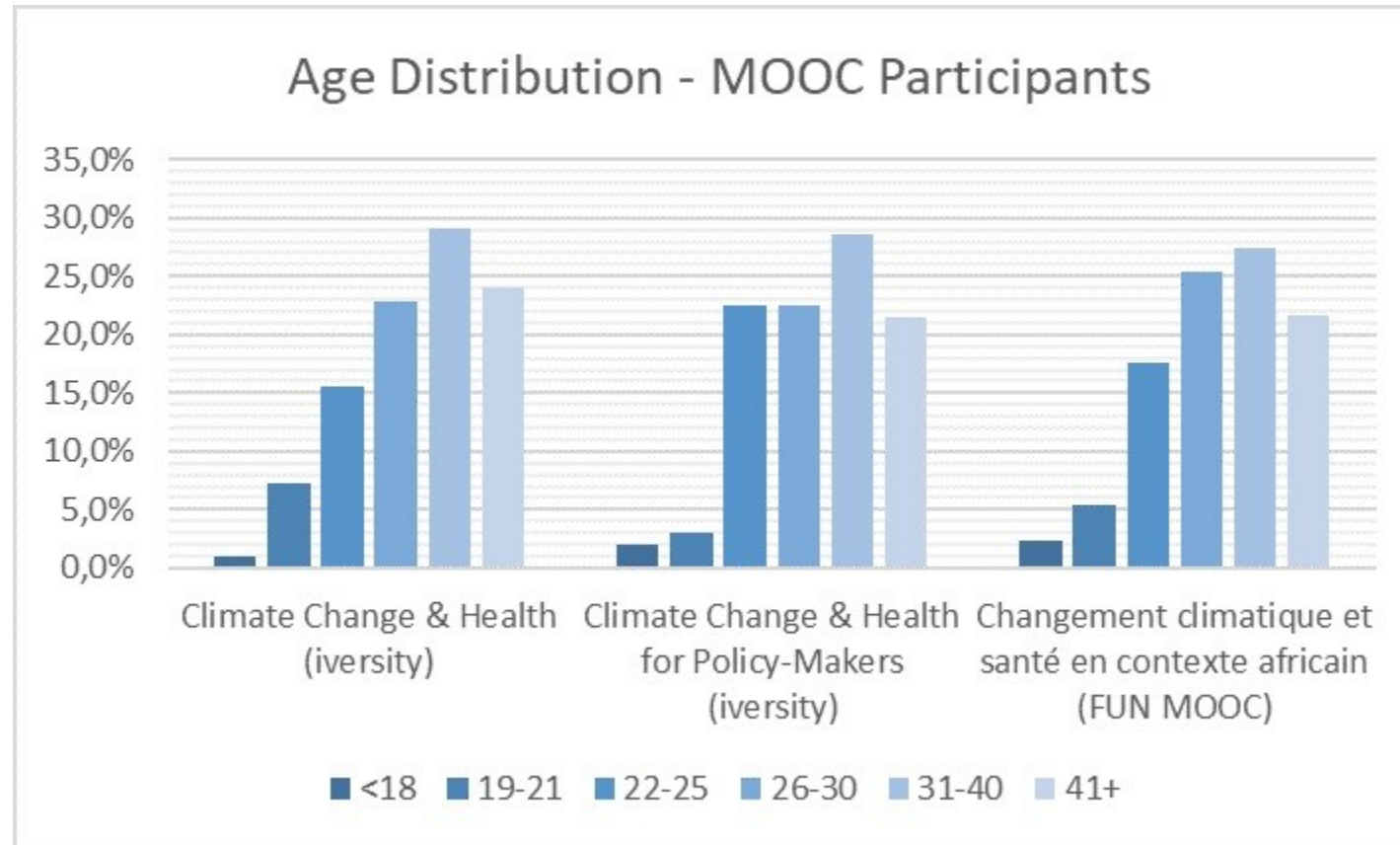


- Language as a barrier for access:
 - all English language MOOCs translated and subtitled: Indonesian, modern Chinese, Portuguese, Spanish, French, Hindi, Indonesian
 - subtitled from CC&H students
 - with Amara (web-based non-profit project)

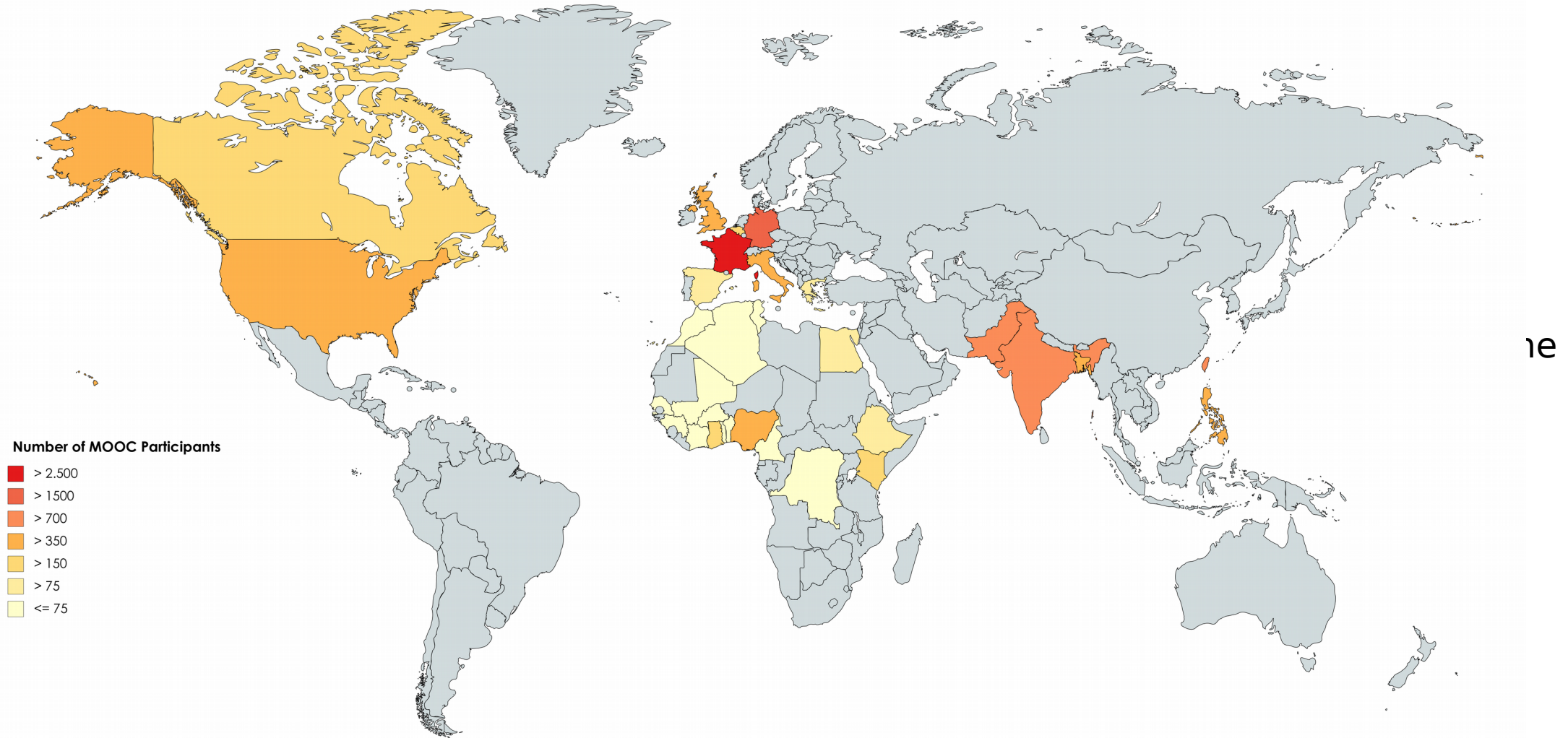
MOOCs: Climate Change and Health Overview

	Climate Change and Health	Climate Change and Health for Policy-Makers	Changement climatique et santé en contexte africain
Number of participants	2735	1782	2451
Total Number of Participants Certified	24	349	213
% Participants Certified	1%	20%	9%
Course Progress:			
< 5% (total / %)	2111 / 77%	1167 / 65%	
5 - 20% (total / %)	335 / 12%	174 / 15%	
20 - 80% (total / %)	143 / 5%	126 / 7%	
> 80% (total / %)	167 / 6%	342 / 19%	
Total min. runtime videos	244	41	198
Number of videos	25	4	23
Avg. min per video	9.8	10.25	8.6
MOOC runtime (weeks)	6	1	5
Subtitles	9 (Arabic, Chinese – Mandarin, English, Hindi, Indonesian, French, Portuguese, Russian and Spanish)	7 (Arabic, Chinese – Mandarin, Hindi, Indonesian, Portuguese, Russian and Spanish)	English

MOOCs: Age Distribution

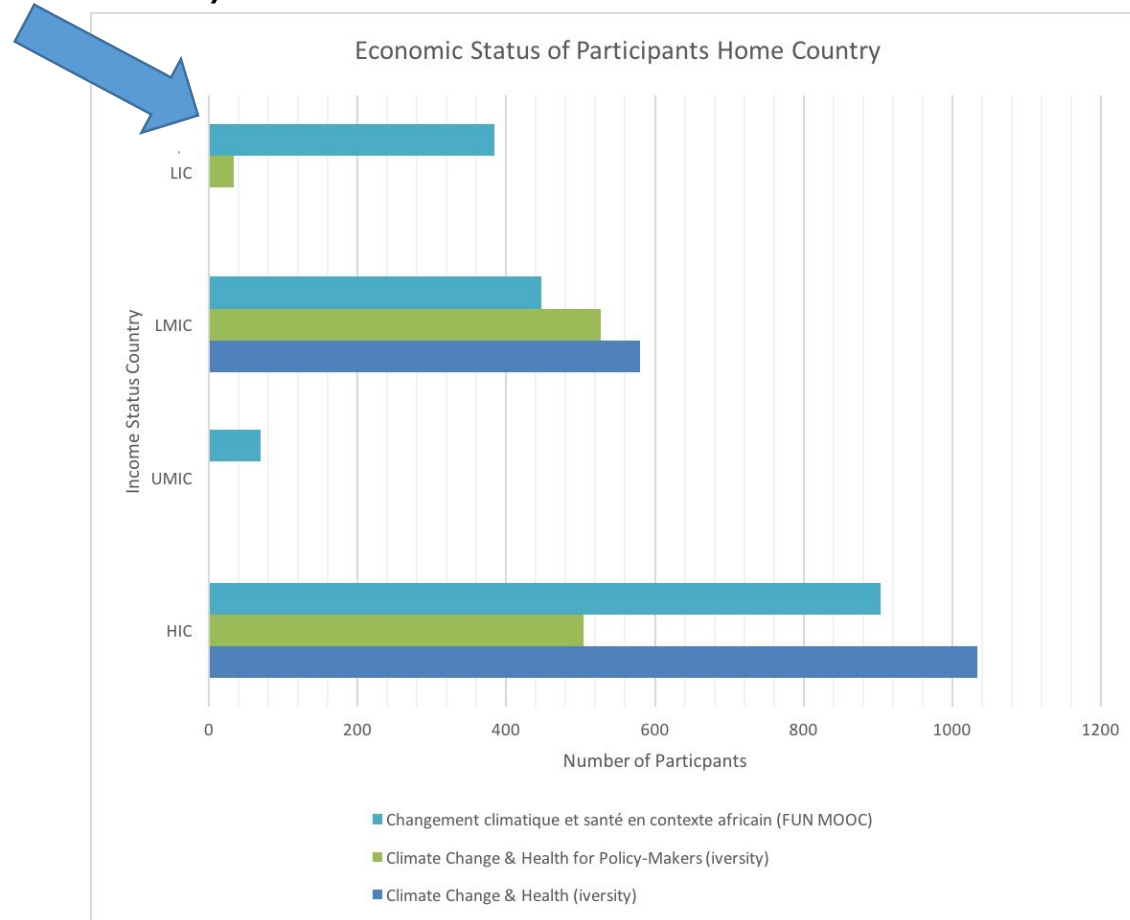


MOOCs: Course Participants – Country of Origin

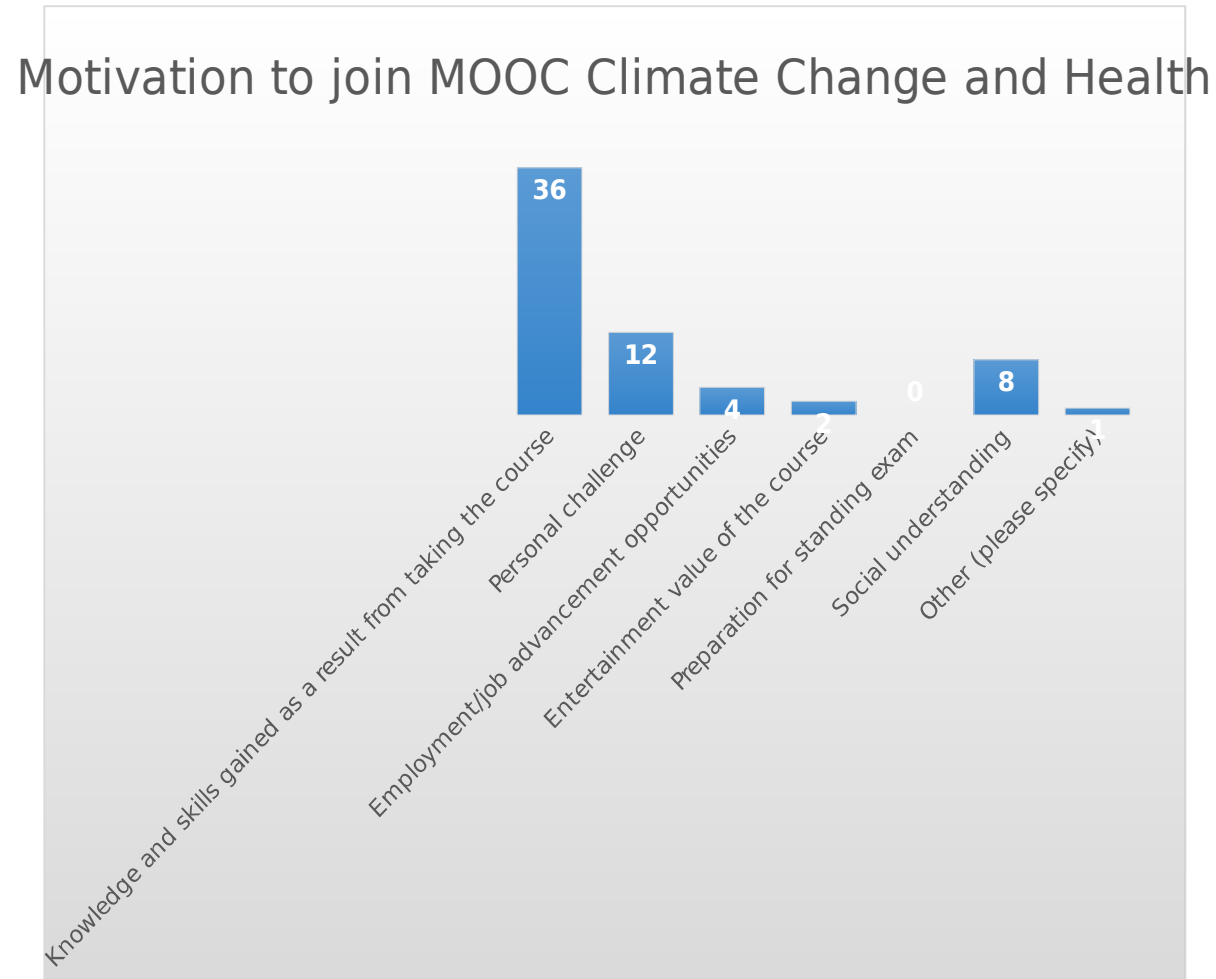


MOOCs: Income Categories of Participants

(according to World Bank)



MOOCs: Motivation and Educational Background



In Development: MOOC on Research Methods in CC&H

- addresses doctoral students and post docs with a grounding in statistics and epidemiology
- Teaching on methods:
 - such as Time Series Analysis, using satellite data, working with climate models etc.
- Participants must have done the general MOOC (1)
- Provide them with real data sets to work on from Africa and Asia
- Working on their research proposals (optional)
- **Incentive:** Selection of best candidate/s and research topic for proposal writing workshop

“Global Health” Angle for Developing MOOCs

- Adapt to part-time use
- Adapt to low-bandwidth/high-costs for Internet access
- Reach non-native English-speakers
- Keep students engaged (high completion rates)
- Community of alumni for future training and research
- Integrate with presence courses
- Reach different audiences with different MOOCs (on different platforms) \Rightarrow participation from resource-low settings
- Evaluation of MOOCs