

FINAL EXTERNAL EVALUATION - LONG FORM REPORT

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Final External Evaluation - Long Form Report

“Pathways to Innovation” - Strengthening Mathematics, Science and Economic Policy Capacity in Afghanistan and Central Asia, a program by the University of Central Asia (March 2017-August 2020)

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Introduction

This is the final evaluation of the “Pathways to Innovation” (P2I) program, a three-year program by the University of Central Asia (UCA) to strengthen Mathematics, Science and Economic Policy Capacity in Afghanistan and Central Asia. The program was implemented between March 2017 and August 2020 with funding from the International Development Research Centre (IDRC) and Aga Khan Foundation Canada (AKFC) for a total budget of CAD \$2.2 million.

UCA focused on three key countries in its region of operation: Afghanistan, Kyrgyzstan, and Tajikistan. While possessing their own specificities, these countries also present important commonalities in terms of geography, culture, religion and history, and suffer from interdependent and complex challenges that affect their development.¹ Specifically,

- In economic terms, the countries’ economic outlooks remain negative and based on unsustainable exogenous sources of growth. Tajikistan and Kyrgyzstan are among the most remittance-dependent countries in the world², and were negatively affected by the collapse of the Russian Rouble and Kazakh Tenge following falling oil prices in the 2014-2016 period. These resulted in devaluations and significant drops in per capita income.² Afghanistan’s economy is more dependent on aid and contracted severely in 2014 following the withdrawal of Western forces and international aid organizations.³ The decreasing willingness of regional superpowers and the international community to underwrite the region has plunged it into a prolonged stagnation. This has also created stronger persuasion on the part of government elites that only endogenous sources of growth can steer these countries on a path to prosperity, with greater demand for evidence based-policy solutions that are relevant to the region’s unique context.
- In terms of education, curricula and research agendas at the secondary school and university level remain outdated and do not meet the growing demand from STEM sectors.⁴ Poor focus on quality education that strengthens mathematical and analytical skills in turn weakens prospects to strengthen these countries’ economic foundations.
- Access to quality education remains an acute challenge for women, particularly in Afghanistan, where entrenched cultural norms that oppose the education of girls have taken their toll. Girls’ primary and secondary school enrolment remains amongst the lowest in the world, despite improvements since the fall of the Taliban. Adult female literacy stands at 13%⁵, which cripples equal access to labour markets, with only 25% of women in paid employment⁶. In Tajikistan and Kyrgyzstan, women possess greater access to educational and economic opportunities but these tend to be focused on tertiary and vocational education, resulting in less women employed in technical fields or in jobs, including in government, that require quantitative and analytical skills⁷.

1 This summary of the program, including cited sources, is drawn from the initial proposal submitted by UCA and AKFC to IDRC.

2 The World Bank, “A Moderate Slowdown in Economic Growth Coupled with a Sharp Decline in Purchasing Power”, Economic Update No. 2, 2015.

3 Favez and O’Donnell, “Afghan Economic Crisis Looms as Foreign Aid Dollars Depart”, Washington Post, 2015.

4 JL De Muelemeester and Rochat, “A causality analysis of the link between higher education and economic development”, *Economics of Education Review*, 1995

5 A. Strand, “Financing Education in Afghanistan: Opportunities for Action”, Oslo Summit for Education for Development, July 2015.

6 Ministry of Economy of Afghanistan (n.d.), “Afghanistan’s Job Challenges”, 2016.

7 Asian Development Bank, “Synthesis Report: Central Asia”, 2016.

This also translates in persistent gender-related wage gaps⁸. Overall, these countries are far from harnessing the potential skills and contributions of women to economic development.

- These challenges are further exacerbated by the region's unique mountainous geography and climatic conditions. Studies show climate change could exacerbate food insecurity in the region, with examples of floods, landslides, changes in crop seasons and outputs, degradation and desertification already reducing food security and livelihoods and potentially impacting an already challenging economic situation.⁹ Preparing these countries for increased readiness in dealing with a changing natural environment is central to addressing the economic challenges of today and tomorrow.

It is against this backdrop that UCA implemented a multi-pronged program to contribute to human and organizational capacity for innovation in Central Asia and Afghanistan by enhancing the knowledge and analytical skills of individuals (especially women), institutions and organizations, in mathematics, science, and economic policy. The program was built around three objectives and components, each implemented by a different school/institute of UCA.

(1) In order to strengthen the economic policy analytical skills of Afghan, Kyrgyz and Tajik governments and representatives of civil society, professional and business associations (objective 1), UCA, via its Institute of Public Policy and Administration (IPPA) set out to design and deliver a new compendium of research on economic policy of relevance to the unique context of the sub-region, and used it to inform policy advice (output 1.1.1) as well as the design and delivery of brand new certificate and executive master's courses on economic policy (output 1.1.2).

(2) In order to strengthen mathematics teaching skills and increased awareness on gender-responsive pedagogy to facilitate access of girls and women to education in North-Eastern Afghanistan, UCA, via its School of Professional and Continuing Education (SPCE), developed and delivered curricula and trainings on Mental Mathematics (output 2.1.1a) and Gender Pedagogy and Gender Responsive Learning Environment (GRLE) (output 2.1.1b) for faculty, teachers, students, administrators at Teacher Training Colleges, Schools and the University of Badakhshan in North-Eastern Afghanistan.

(3) In order to strengthen science capacity through development and support of transdisciplinary environmental research in Afghanistan and Tajikistan, UCA, via its Mountain Societies Research Institute (MSRI) supported three universities in mountainous regions of Afghanistan and Tajikistan to design and deliver research on agriculture, horticulture and related topics (output 3.1.1) in combination with the development and delivery of a new certificate program on natural resource management for researchers and academics (output 3.1.2).

After providing an overview of the methodological approaches and research questions that drove this final program evaluation, this report comments separately on each of the three components of the program and provides recommendations to each school/institute. These are followed by an overarching assessment of UCA's delivery of the program with crosscutting recommendations for the university staff and leadership.

8 Ibid.

9 International Fund for Agricultural Development (n.d.) "Climate Change Impacts – Central Asia", 2009.

Acronyms

AKF-A	Aga Khan Foundation-Afghanistan
AKFC	Aga Khan Foundation Canada
AKDN	Aga Khan Development Network
CPEP	Certificate Programme in Economic Policy
CPNRM	Certificate Programme in Natural Resource Management
EMEP	Executive Masters' in Economic Policy
GIZ	German Agency for International Cooperation
GRLE	Gender Responsive Learning Environment
GSD	Graduate School of Development
IDRC	International Development Research Centre
IPPA	Institute of Public Policy and Administration (part of GSD)
KIMEP	Kazakhstan Institute of Management, Economics and Strategic Research
KSU	Khorog State University
MM	Mental Mathematics
MoF	Ministry of Finance in Afghanistan
MSRI	Mountain Societies Research Institute
MSDSP	(ADKN's) Mountain Societies Development Support Programme
NGO	Non-governmental organization
NRM	Natural Resource Management
P2I	Pathways to Innovation Program
SPCE	School of Professional and Continuing Education
TTC	Teacher Training College
UCA	University of Central Asia
UN	United Nations
WB	World Bank

Methodology

1. Research questions

This evaluation was informed and guided by evaluation Terms of Reference (Annex 1) provided by UCA as well as research questions that defined and directed the scope of document review, data collection and analysis. The following research questions were agreed with UCA:

- **Effectiveness: did the program achieve its objectives?** This involved assessing whether outputs were delivered and where possible, assessing the quality of the outputs in relation to stated objectives.
- **Impact: what difference did the program make?** This involved looking at the extent to which UCA's interventions generated significant positive or negative, intended or unintended, higher-level effects, including immediate and intermediate outcomes.
- **Sustainability: will the benefits from the program last?** This involved exploring to what extent the net benefits of the program continue, or are likely to continue after its end.

The exact definition of effectiveness, impact and sustainability for the three different objectives/components of the program was guided by the program's logical framework, the evaluator's own considerations as well as OECD DAC evaluation principles and criteria.

By derivation, this evaluation did not look into the following areas:

- **Relevance: did the program do the right things?** While the evaluation provides context on the rationale and problems the program tries to address for the benefit of lay readers, this did not involve any judgment or further analysis on the part of the evaluator. However, comments on responsiveness to beneficiaries (however these are defined for each program component, e.g., researchers, partner universities students etc.) were provided as part of evaluator's analysis of the effectiveness of program interventions.
- **Coherence: how well did the program fit?** The evaluation did not look into the compatibility of the program with other interventions in target countries, sectors or institutions. This would have required require significant work in mapping the sectoral and country ecosystems, which was unrealistic given the time at hand. The evaluation does however comment on efforts and results in building partnerships as part of effectiveness and sustainability.
- **Efficiency: how well were resources used?** The evaluation did not look into whether the program delivered results in an economic and timely way. Assessing this was deemed outside the scope of what was feasible in the time available for this assignment.

2. Evaluation approach and guiding principles

The evaluation was guided by the following approaches and principles.

- **Theory-based approach:** this involved mapping theories of change that underpinned the program, including implicit and explicit assumptions and tracing how outcomes relate

backward to outputs and forward to sustainability. The three research questions identified above broadly map against output and outcome levels identified in the log-frame and by derivation the program's theory of change.

- **Co-creation:** the evaluation was guided by UCA inputs at key stages. This was to ensure that the evaluation stayed focused on UCA priorities as well as those of the program's donors, as understood by UCA. At a high level, UCA inputs were solicited at the following stages:
 - *Inception:* An inception meeting was held with Sameer Dossa and Prof. Bohdan Krawchenko to discuss overall focus of the evaluation, including research questions, evaluation methods, as well as emerging evaluator questions; and to review availability of monitoring data and discuss additional data collection methods.
 - *Data collection:* interviews were held with key staff at the university and the three schools/institutes involved in the implementation of the three program components.
 - *Data triangulation:* where the data collection surfaced inconsistencies or divergent perspectives between internal and external stakeholders, the evaluator followed up with relevant UCA staff to probe further and address information gaps or inconsistencies.
 - *Feedback on draft report:* before the report was finalized, key UCA staff were asked to provide comments, including to object to findings. Where relevant evidence was provided, feedback was integrated in the final version of the report.
- **Participation:** in addition to soliciting views and inputs of internal stakeholders (i.e., key UCA staff), the evaluation elicited views of external stakeholders; these are the ultimate direct beneficiaries of the program, as conceptualized by UCA for its different program components (e.g., researchers/faculty, partner universities, teachers, trainees etc.). This did not include however the indirect beneficiaries of the program (e.g., pupils in Mental Maths programs, or students in courses taught by CPNRM graduates).
- **Gender responsiveness:** the data collection and analysis process assessed to what extent gender and power relationships changed as a result of UCA's interventions. The evaluation also ensured that women's voices were prominent, which informed the selection of key informant interviews.
- **Objectivity:** in order to ensure objectivity of findings, data was triangulated: what emerged from document review was probed further through additional data collection. The views of internal stakeholders were cross-checked against those of external stakeholders. The process of triangulation ensured that the views contained in the draft report were as well informed and accurate as possible. However, it is typical for an exercise of this nature to suffer from occasional fragmentation of data (i.e. there were issues, or aspects of the program where it was not be possible to check both internal and external stakeholder views). In keeping with Latours' approach to objectivity in sceptical evaluation ("allowing an evaluand to object to what is said about them")¹⁰, UCA was asked to comment and if relevant object or question the draft findings, and where alternative conclusions were provided with evidence, these were incorporated in final report revisions.

¹⁰ D. Mosse, "Anti-social anthropology? Objectivity, objection, and the ethnography of public policy and professional communities". *Journal of the Royal Anthropological Institute* 12, no. 4 (2006).

- **Transparency:** any limitations in the design or delivery of the evaluation are acknowledged and explained in the report, including with mentions on how they impact the final output and the overall validity of findings. See below for more.
- **Ethical considerations.** This evaluation was guided by sensitivity to local beliefs and culture and individual circumstances. For instance, recognizing that English proficiency was an issue for some informants, informants were sent questions well in advance and given the option to respond in writing. This said, all informants opted for interviews. Also, interviews were conducted under conditions of confidentiality to encourage honest and critical feedback and respect the right of informants to provide information in confidence. This means that the report does not attribute views or statements to clearly identifiable KIIs other than noting whether they were internal or external KIIs, where this does not give away the identity of informants. Where indicating “internal” or “external” could give away the identity of the interviewee, only the word “informant” is used. Also, the report uses they/ them instead of she/her or he/his to further preserve anonymity, where mentioning the gender could help identify the respondent.
- **EU GDPR compliance.** The evaluation data gathering process, data management and presentation of information in this report are in compliance with the EU’s [General Data Protection Regulation](#), which applies to the work of the evaluator.

3. Data collection and analysis

Data for this evaluation was collected over the course of July and August 2020. The following sources of information were used in this evaluation:

- **Existing documentation and data.** This included review of project documents, monitoring reports and evaluations already conducted by UCA in the course of the program, and made available to the evaluator. To the extent that evaluations were conducted for select components of the programs, priority was given to using existing data to inform the final evaluation (as opposed to gathering new data). In general, the documentation made available to the evaluator was very comprehensive and included useful self-assessments developed by each UCA school/institute leading each component of the P2I program and a number of evaluations and assessments of performance, conducted internally or by independent consultants. Annex 2 provides an overview of documents reviewed for this evaluation.
- **Key informant interviews (KII).** A total of 18 KIIs were conducted with key internal and external stakeholders that could speak in a rounded manner about key components and aspects of the program and in relation to the different research questions. In order to ensure efficiency in data collection, priority was accorded to informants that could speak to multiple aspects of the program (e.g., most external interviewees for objective 3 participated in both MSRI-led CPNRM and research projects). External informant interviews were conducted only when it was *realistic* and *useful* to do so. For instance, for objective 2 – the SPCE component, the number of beneficiaries targeted was very high (over a hundred for Mental Maths, and over a thousand for GRLE) and the program had already collected solid data on the performance of these beneficiaries, making the value of additional data collection limited and difficult to implement under the agreed evaluation timeframe. Table 1 provides a high level analysis of interviewees and Annex 3 provides a complete list of respondents. Overall the selected pool covered all countries and program components, and

for each component both internal and external KIIs. Efforts were made to include the voice of women, by prioritizing external KIIs to include an equal number of male and female beneficiaries. These efforts resulted in good gender balance in external KIIs. When it comes to internal KIIs, priority was naturally accorded to soliciting the views of the program staff who were directly involved in, and familiar with the program. Since most of these staff were male, this impacted the gender distribution of internal KIIs.

Table 1– Analysis of type, gender and country of KIIs

Variables	Count	Percentage of total
Type (internal or external)		
Internal KIIs	12	67%
External KIIs	6	33%
Location		
Kyrgyzstan	8	44%
Afghanistan	6	33%
Tajikistan	3	17%
Other	1	6%
Gender – all KIIs		
Females	6	33%
Males	12	67%
Gender – internal KIIs		
Females	3	25%
Males	9	75%
Gender – external KIIs		
Females	3	50%
Males	3	50%

- **The inquiry was driven by mixed methods.** Qualitative data and analysis were used to provide relevant context to any findings and recommendations. Qualitative insights were combined with quantitative data and analysis to provide comparative trends where these yielded interesting insights. Quantitative analysis was conducted relying on quantitative data gathered by UCA (e.g., data from participant sheets, evaluation or assessment forms etc.). No primary quantitative data collection was undertaken. Annexes 4a, 4b and 4c provide data used in this report¹¹

4. Limitations

This evaluation suffers from a number of limitations:

- **Compressed timeframe:** This evaluation and the writing of three accompanying case studies were conducted under a compressed timeframe, with the majority of data collection and writing taking place simultaneously between 1 July and mid-August 2020 for delivery of the final report on 25 August. This inevitably impacted the breadth of the

¹¹ Data are anonymized, names and surnames have been removed in respect of anonymity and in compliance with the EU General Data Protection Regulation. It should be noted that there's been little time to better present and organize the data sheets, and they may appear confusing to a lay reader. Finally, for the IPPA component, a number of additional sheets were used for data analysis and the annex only provides summary data.

exercise, with decisions to focus data collection on methods that would yield timely information. For instance, options for conducting surveys in local languages, to complement insights from KIIs, were proposed in the initial evaluation design and discussed at inception with UCA but not pursued due to limited time available and feedback from staff it had been difficult to obtain good response rates to online surveys. Also, additional external KIIs were considered but could not be implemented in the time available. Finally, self-assessments reports from each school/institute, and related documentation were sent in a staggered manner, and in one instance later than agreed with the evaluator due to issues in accessing data stored at UCA as key program staff were working from home due to Covid-19 restrictions¹². Some inputs required extensive exchanges with relevant program leads to fill information and data gaps. This meant that the data collection and analysis took place simultaneously, with each component of the program being assessed sequentially. Further, the evaluator had to set different cut off dates for feedback from each school/institute, and some data additions that came too late or emerged as pending program activities were implemented, could not always be integrated, as explained in relevant footnotes in the report.

- **Impact lags:** educational and research programs like those under the P2I program come with impact lags, as time is needed to observe how the assimilation of new knowledge is converted into changed practices and behaviours. While this evaluation comments on impact and suitability of the program, it does so from the narrow lens of impacts that can be observed at the end of the program. Additional results and impacts are likely to emerge in the future, especially for those components of the programs that were nearing completion at the time of this evaluation (e.g., MSRI research papers).
- **Language limitations.** The evaluator is not proficient in Dari or Russian. Despite UCA's offer to provide interpretation via its staff, the evaluator accorded priority to interviewing external informants directly, to preserve objectivity and confidentiality. This meant priority was given to KIIs who were somewhat proficient in English, without intermediation/interpretation. This in turn restricted the possible pool of beneficiaries to be interviewed in some cases (e.g., CPEP participants). As noted above, options to target a broader pool of respondents via local language surveys were considered, but the limited time available for the evaluation made it difficult to implement them.
- **The quality of quantitative data and analysis varies and should be interpreted with caution.** Despite the rich data collected and analysed by UCA, a number of limitations must be noted. First, there was no original quantitative data collection for this evaluation and all data was gathered from material and evaluations made available by UCA. While all data was cleaned and re-analysed, and some data was cross-checked with original sources (e.g., actual evaluation forms submitted by participants, where these were in English), cross-checking could not be done systematically. For instance, the evaluation could not cross check consistently with original data sources, such as completed participant evaluation forms, because of language constraints (e.g., scans of course evaluations completed by course participants in Russian). As such, the evaluation notes when data used are simple re-elaborations of UCA's analysis.

¹² Cross-cutting documentation was sent on 1 July 2020 but it presented gaps, especially in terms of the last year of the program. The MSRI self-assessment was sent on 7 July. The SPCE self-assessment was shared on 23 July. The IPPA self-assessment was sent in batches with the final and revised self-assessments for the EMEP sent on 4 August, followed by the self-assessment for the CPEP on 9 August.

Secondly, some of the data gathered by UCA involved self-assessment by participants. Self-assessments are likely to include some positive bias on the part of participants who may have amplified the extent of their achievements. Where obvious outliers in data were noted, pointing to bias, these were noted in the evaluation. In general, whenever quantitative data is used in the report, a footnote is added to provide context on the data and how it should be interpreted.

These limitations are not unusual for an evaluation that took place under an unusually compressed timeframe and it is deemed that they do not affect the overall validity of the findings and recommendations presented in the report. Suggestions on how to improve UCA's evaluation readiness for future programs are offered at the end of this report.

Findings

1. Assessment of “Objective 1 – Strengthen the analytical ability of Afghan, Kyrgyz and Tajik Governments and representatives of civil society, including professional and business associations, in economic policy” (IPPA component)

This section of the report covers work under objective 1 of the P2I program, which was led by the Institute of Public Policy and Administration of the Graduate School of Development at the UCA (IPPA thereafter). This includes “Output 1.1.1. Research and dissemination on economic policies that promote scientific and technological development” (IPPA research papers, in short), and “Output 1.2.1 Design and Delivery of Certificate and Master’s Program in Economic Policy” (henceforth referred to as CPEP and EMEP). Recommendations to IPPA are offered at the end of the section.

1. IPPA Research Papers

1.1 Assessment of the design and delivery of research projects

- **Key leaders at IPPA defined the research agenda, with a focus on filling knowledge gaps in the region, informing policy making and generating content for IPPA’s new courses.** Interviews with respondents suggest that the definition of the research agenda was driven internally by key GSD and IPPA leaders, with three general objectives in mind: to fill the knowledge gaps on relevant economic policies in the target countries; to inform the curricula of the certificate and executive master programs on economic policy; and to influence policy making in the region. IPPA reports requesting that all research leads integrate ethical and gender responsiveness considerations in their research. Most papers underwent peer review by Prof. Grogan, who was contracted for this purpose, or by other internal or external academics who are well-versed in relevant subject matters.¹³ Respondents explained that IPPA, being a small policy institute within the GSD, did not possess at the start of this program, more formal research formulation and approval processes, such as the mandatory formulation of research proposals and review/approval by a research review committee. Such processes are however being established in other entities within UCA and have been leveraged with success for other research initiatives under this program (e.g. MSRI research papers). As further outlined under the recommendations, there may be opportunities in the future to strengthen research definition and accountability by leveraging research proposal templates (i.e., covering research objectives, intended uses and audiences, unique gaps of knowledge being addressed, links to existing literature etc.) and the collaborative review and feedback power of research committees.
- **IPPA has for the most part delivered its research commitments, with some research still underway. It overall produced a coherent and well written body of work on public policies that are instrumental to technological development and innovation of the region, smartly adapting**

¹³ IPPA reported that other peer reviewers included Bakyt Dubashev, World Bank Country Office; Charles Becker, Professor at Duke University and Marek Dabrowski, professor, at the Center for Social and Economic Research.

its agenda in response to emerging challenges and opportunities. As shown in table 2, 8 papers have been published to date. There are 4 additional papers that were reported at final review stage. All pending papers are from authors that were leading on 2 or 3 research papers and had broader responsibilities in relation to the program, which may explain some of the delays. Further, informants explained that two additional papers¹⁴ will be published by the end of August with an ongoing commitment to finalize the rest later. Once the remaining papers are completed, IPPA will have produced a total of 12 papers, exceeding its target for the program of 10. A total of 14 authors have been engaged to lead the writing of these papers, 7 women and 7 men¹⁵.

Together these papers represent a comprehensive compendium on policies for science and technological innovation and investigate key policy aspects that shape them, such as education policy, labour markets, agricultural policy, climate change, fiscal policy, trade policy and gender as a cross-cutting issue. One informed respondent noted that the papers are generally well written, with some being unique in value: “UCA is one of the few organizations that is digging around for new data and analysis”. Feedback was particularly positive on the work of Roman Mogilevskii, in terms of the new data and complex analysis done on hard to access data from official government sources. When it comes to gender, IPPA reports that three papers include gender dimensions, and a fourth paper is entirely focused on gender issues.¹⁶

While sticking to the core of the research agenda proposed to IDRC, IPPA introduced interesting process and content adaptations in response to challenges and opportunities. For instance, following difficulties in identifying a research lead for a paper on *Technological Change, Innovations and Economic Empowerment of Women in Afghanistan*, IPPA saw an opportunity to combine the expertise of IPPA staff and students attending its EMEP course to elevate the calibre of an EMEP capstone projects and turn it into an official UCA working paper.¹⁷ Similarly, a recently published paper, the result of a collaboration with the Biruni Institute, an Afghanistan-based policy institute, explores the impact of the Covid-19 crisis on Afghanistan's overall macroeconomic outlook.¹⁸

14 Informants confirmed that the paper on “Labour market in Afghanistan and Central Asia: trends and policies conducive for innovation” is currently with the peer reviewer. The paper on “SME Development Policies and Technological Innovations in Afghanistan and Central Asia” was not yet final at the time this report was being compiled and it will still need to undergo peer review internally.

15 For completeness, it should be noted that all papers had a single research lead, with the exception of “The Role of Women in the Economic Development of Afghanistan”, which had 7 co-authors, 5 women and 2 men. Also, some authors were responsible for multiple papers. Nazgul Jenish (F) led two papers. Roman Mogilevskii (M) and Kanat Tilekeyev (M) led three and two papers respectively.

16 “The Role of Women in the Economic Development of Afghanistan” is focused on gender issues. IPPA self-reporting suggests that 3 additional research papers – those on education, public finance, and labour markets – also including a gender lens.

17 Madina Junussova et. al , *The Role of Women in the Economic Development of Afghanistan*, 2019

18 *Afghanistan Economic Outlook*, Vol. 1, Issue 2, 2020

Table 2 – Status of IPPA research projects, in chronological order of publication

#	Title	Lead author and gender	Status	Date of publishing	Languages
1	ICT-Driven Technological and Industrial Upgrading in Afghanistan, Kyrgyzstan and Tajikistan: Current Realities and Opportunities	Nazgul Jenish (F)	Published	30 October 2018	EN
2	Current State and Development Models of Technology in Kyrgyzstan and Tajikistan	Nazgul Jenish (F)	Published	31 October 2018	RU
3	Macroeconomic Policy Frameworks and Technological Development: Case studies of Kyrgyzstan, Tajikistan and Afghanistan	Nurbek Jenish (M)	Published	08 February 2019	EN, RU
4	Higher Education Policy in Central Asia and Afghanistan	Emma Sabzalieva (F)	Published	23 May 2019	EN, RU
5	The Role of Women in the Economic Development of Afghanistan	Madina Junussova et. al (5F/2M)	Published	06 September 2019	EN
6	Climate Change in Afghanistan, Kyrgyzstan and Tajikistan: Trends and Adaptation Policies Conducive for Innovation	Parviz Khakimov (M)	Published	26 November 2019	EN, RU
7	Public finance in Afghanistan and Central Asia: trends and policies conducive for innovation	Roman Mogilevskii (M)	Published	15 June 2020	EN, RU
8	Afghanistan Economic Outlook, Vol. 1, Issue 2	Omar Joya (M)	Published	02 July 2020	EN
9	Labour market in Afghanistan and Central Asia: trends and policies conducive for innovation	Roman Mogilevskii (M)	Final Draft	Publication planned by end of August 2020	
10	SME Development Policies and Technological Innovations in Afghanistan and Central Asia	Kanat Tilekeyev (M)	Final Draft	Publication planned by end of August 2020	
11	Agriculture in Afghanistan and Central Asia: trends and policies conducive for innovation	Kanat Tilekeyev (M)	Final Draft	Publication after August 2020	
12	Foreign trade in Afghanistan and Central Asia: trends and policies conducive for innovation	Roman Mogilevskii (M)	Final Draft	Publication after August 2020	

- IPPA has disseminated this body of knowledge online and through 12 public events, to at least 524 individuals (298F/226M), exceeding the targets set at the start of the program. There are

however questions on the relevance of the audiences at some of these events in light of the stated objective to influence policy making. The 8 papers that have been published to date have been uploaded on UCA’s website as IPPA Working Papers, with the latest paper being published by the Biruni Institute. These papers are available in both English and Russian, to cater to the linguistic needs of policy makers in the region, with the exception of 3 papers that did not need dual translation since their content targeted either exclusively the Russian-speaking countries of Tajikistan and Kyrgyzstan or Afghanistan, for which English was used. IPPA has further delivered 12 dissemination events (see table 3)¹⁹. The content of all 12 papers, whether draft or final, was disseminated at these events, with each event focusing on one or multiple papers.

Table 3 – List of dissemination events organized by IPPA

#	Event	Date	Themes
1	A roundtable at the 3rd “Life in Kyrgyzstan” Conference in Bishkek	12-13/10/17	Technological Development and Innovations: Trends and Policies; Labour Market Trends and Policies; Climate Change Adaptation Trends and Policies
2	Round table at Khorog State University	19/09/17	Current Situation and Issues of the Labour Market
3	Public lecture at Khorog State University	10/10/17	SME Development Drivers in Tajikistan
4	Public lecture at UCA’s campus in Naryn	14/11/17	Foreign Trade in Central Asia: Trends and Potential to Promote Technological Development
5	Roundtable in Bishkek	31/01/18	Economic Policy for Technological Development in Central Asia
6	Public Lecture in Bishkek, at UCA’s Central Administrative Office	15/02/18	Fiscal Policy for Technological Development in Central Asia
7	Roundtable in Dushanbe	20/02/18	Economic Policy for Technological Development in Central Asia
8	Public Lecture in Bishkek	29/05/18	Education in Afghanistan and Central Asia: trends and policies conducive for innovation
9	A roundtable at the 4th “Life in Kyrgyzstan” conference in Bishkek	17-18/10/18	The Role of Women in Economic Development of Afghanistan; Fiscal Policies for Technological Development in Central Asia; Agricultural Policies in Central Asia
10	Public Lecture Bishkek, at UCA’s Central Administrative Office	24/01/19	Technological and Industrial Modernization in Kyrgyzstan and Tajikistan
11	Public Lecture in Almaty at KIMEP	15/11/19	The Role of Women in Economic Development of Afghanistan
12	Online webinar with focus on Afghanistan	10/08/20	COVID-19: Outlook and Prospects for Economic Recovery in Afghanistan

¹⁹ Upon feedback to this report, IPPA clarified that 13 events actually took place. An event was missing (Public Lecture in Bishkek, organized on 11/10/ 2019, on “The Role of Women in Economic Development of Afghanistan”) in the data provided to the evaluator, and with it relevant participant data. Since this new data came too late in the evaluation process, it has not been added to this report.

As shown in table 4, IPPA met and exceeded the dissemination event targets set at the start of the program, completing 5 roundtables and 6 public lectures against a commitment of 5 and 4 respectively. Seven events were organized in Kyrgyzstan and 3 in Tajikistan. Delivering events in Afghanistan was not possible due to the precarious security context, which prevented travel to the country. As such, IPPA opted for organizing dissemination events on papers of relevance to Afghanistan in other locations (i.e., a public lecture on “The Role of Women in Economic Development of Afghanistan” was held in Kazakhstan) or online (the latest paper co-sponsored with the Biruni Institute will be disseminated through a webinar targeting Afghan audiences). Also, IPPA invited Afghan EMEP students at the 4th “Life in Kyrgyzstan” conference.

Table 4 – Analysis of type and location of events, with comparison against relevant targets

	Target	Achieved	% of total
Type of event			
Roundtable	5	5	42%
Public lecture	4	6	50%
Online		1	8%
Location			
Kyrgyzstan		7	58%
Tajikistan		3	25%
Afghanistan		0	0%
Other: Online, Kazakhstan		2	17%
Total		12	

Through the 11 in-person events only, IPPA reports reaching 524 individuals, exceeding the revised target of 340 as well as the original target of 430 (see table 5).²⁰ Fifty-seven percent of the attendants of these events were reported to be women, well above the 30% target.

Table 5 – Analysis of number and gender of participants at dissemination events

Event	Date	Male	Female	Total
A roundtable at the 3 rd “Life in Kyrgyzstan” Conference in Bishkek	12-13/10/17	49	68	117
Round table at Khorog State University	19/09/17	6	13	19
Public lecture at Khorog State University	10/10/17	9	17	26
Public lecture at UCA’s campus in Naryn	14/11/17	14	20	34
Roundtable in Bishkek	31/01/18	22	16	38
Public Lecture in Bishkek, at UCA’s Central Administrative Office	15/02/18	12	12	24
Roundtable in Dushanbe	20/02/18	22	9	31
Public Lecture in Bishkek	29/05/18	14	18	32
A roundtable at the 4 th “Life in Kyrgyzstan”	17-18/10/18	59	91	150

20 For context, IPPA requested lowering the target from 430 to 340 in year 1 of the program. The figures presented in the table are as reported by IPPA to the evaluator. At a later stage of the evaluation, IPPA also shared a list of participants at its online webinar but these are not included in the figure of 524. The online webinar saw the participation of additional 29 individuals including UCA staff.

conference in Bishkek				
Public Lecture Bishkek, at UCA's Central Administrative Office	24/01/19	17	20	37
Public Lecture in Almaty at KIMEP	15/11/19	2	14	16
Total		226	298	524
Percentage of total		43%	57%	100%

An analysis of available data on professional affiliation (table 6) shows that the 48% of participants at these events originated from academia, 17% from international organizations, 13% from governments, 12% from other national organizations or entities. For 11% it was not possible to assign a professional affiliation on the basis of available data.²¹ It is worth noting that the “Life in Kyrgyzstan” conferences overall mobilized a more balanced cross-section of stakeholders than other events. At the other end of the spectrum, some roundtables and public lectures only attracted academic participants. While IPPA noted that these events were primarily intended to engage with local academics in Naryn and Khorog at no cost for the project, there are still questions on how these events ultimately supported IPPA’s objective of influencing policy-making in the region. While academia is an important indirect influencer of policy, and building a shared understanding across academia is a powerful channel for long term policy influence, direct dissemination of findings to policy makers, non-governmental organizations and the international organizations that assist them is a more direct channel of medium-term influence, especially in more open societies. In this respect, it appears that large-scale and reputable events like the “Life in Kyrgyzstan” have been more effective in mobilizing the wide range of audiences that are directly or indirectly involved in policy making.

When it comes to Afghanistan, IPPA reports in its self-assessment that events organized online or outside the country were partly successful in reaching Afghan audiences but the frequency of online events should be increased to establish and grow a loyal audience. The data on participants at these events raises questions on whether organizing seminars in other countries or online is a workable alternative to bring research insights to a critical mass of relevant policy makers.²²

21 These data were drawn from records of attendance shared by UCA at a secondary stage of the evaluation, following evaluator requests. The overall number of participants in this table does not perfectly match other data since more or fewer participants were recorded for some events. These discrepancies do not affect the overall trends surfacing from the analysis. Participants were assigned to one of these categories: *International Organizations* include multilateral and bilateral donors, embassies, and international NGOs; *Government* includes staff from ministries and other government bodies; *Academia* includes leadership, faculty and students from national, regional or international academic institutions, including UCA; *other organizations* include individuals from national NGOs, private sector, media, consultancies and other civil society forces; *Unknown* was used when professional affiliation data was missing or could not be reconstructed.

22 Available data on this is limited. There is no record of participant nationality for the Almaty event but IPPA reports that some of the students in attendance were Afghan students at KIMEP. As for the online webinar, IPPA reported that 5 speakers were Afghan but it was not possible to get precise information on how many were policy makers.

Table 6 – Analysis of professional affiliation of event participants

Event	Date	Int'l Org.	Gov't	Academia	Other org.	unknown	total
A roundtable at the 3rd “Life in Kyrgyzstan” Conference in Bishkek	12-13/10/2017	27	19	46	22	3	116
Round table at Khorog State University	19/09/17	0	0	19	0	0	19
Public lecture at Khorog State University	10/10/17	0	0	26	0	0	26
Public lecture at UCA’s campus in Naryn	14/11/17	0	0	0	0	34	34
Roundtable in Bishkek	31/01/18	6	7	18	6	1	38
Public Lecture in Bishkek, at UCA’s Central Administrative Office	15/02/18	6	0	13	3	1	23
Roundtable in Dushanbe	20/02/18	2	3	13	5	8	31
Public Lecture in Bishkek	29/05/18	3	2	22	4	1	32
A roundtable at the 4th “Life in Kyrgyzstan” conference in Bishkek	17-18 Oct 2018	43	33	53	23	2	154
Public Lecture Bishkek, at UCA’s Central Administrative Office	24/01/19	2	3	25	0	7	37
Public Lecture in Almaty at KIMEP	15/11/19	0	0	16	0	0	16
Total		89	67	251	63	57	526
Percentage of total		17%	13%	48%	12%	11%	

1.2 Assessment of research projects process impact

- **Data provided by IPPA suggest the most viewed papers are also the ones that have been cited in third-party research.** When looking at the 7 papers published by the end of June 2020, data provided by IPPA suggest that research may have been viewed a total of 2524 times.²³ An analysis of publication specific data show that two papers – *Higher Education Policy in Central Asia and Afghanistan* and *The Role of Women in the Economic Development of Afghanistan* – are responsible together for 1377 page views or 54% of the total.

These two papers are also the only ones that have been cited in research by others, with a total of 4 unique citations recorded on Google Scholar to date, two for each paper.²⁴ According to an

23 UCA provided what were initially understood to be download data for each relevant paper by year and language. These were re-elaborated and analysed by the evaluator. After evaluator queries, UCA communications department clarified that the data provided were in fact research overview *page views*, and *not* actual *downloads* of PDF documents. It is therefore not possible to provide a comparison against the log-frame target of 1000, which clearly relates to downloads. This limitation could not be addressed as UCA transitioned files to new online storage locations, which prevented it from generating accurate download data.

24 Academic citations have been collected and analysed by the evaluator using Google Scholar. It should be noted that citations were not part of the initial log-frame, but they are generally regarded as standard indicator of research influence. This said, not all research can or should aspire to citations, especially when it is intended

internal informant, the success of the *The Role of Women in the Economic Development of Afghanistan* may be ascribed to the high international profile accorded by the international community to gender issues in the country. It was not possible to determine whether higher use correlates with more proactive dissemination by the authors of those papers, their quality or other contextual factors.

Table 7 - Downloads and academic citations of research published up to the end of June 2020

#	Title	Date of publishing	Page views			Citations		
			English	Russian	Total	English	Russian	Total
1	ICT-Driven Technological and Industrial Upgrading in Afghanistan, Kyrgyzstan and Tajikistan: Current Realities and Opportunities	30 October 2018	113	45	158	0	N/A	0
2	Current State and Development Models of Technology in Kyrgyzstan and Tajikistan	31 October 2018	137	79	216	N/A	0	0
3	Macroeconomic Policy Frameworks and Technological Development: Case studies of Kyrgyzstan, Tajikistan and Afghanistan	08 February 2019	225	163	388	0	0	0
4	Higher Education Policy in Central Asia and Afghanistan	23 May 2019	479	119	598	2	0	2
5	The Role of Women in the Economic Development of Afghanistan	06 September 2019	744	35	779	2	N/A	2
6	Climate Change in Afghanistan, Kyrgyzstan and Tajikistan: Trends and Adaptation Policies Conducive for Innovation	26 November 2019	238	63	301	0	0	0
7	Public finance in Afghanistan and Central Asia: trends and policies conducive for innovation	15 June 2020	61	23	84	0	0	0
	TOTAL		1997	527	2524	4	0	4

- **It is not possible to determine at this stage whether, to what extent and how this new body of knowledge influenced policy in the region.** Given lack of data and longer lags needed for policy influence, it is not possible to assess if and how IPPA’s new body of knowledge may have influenced policy thinking. An internal interviewee explained that: “at events, we had fruitful discussions about policy relevance with development professionals (e.g., from UN agencies, WB, GIZ) and government officials. We cannot claim that this or that government policy has been impacted by our work but eventually, over time, you see evidence of some uptake.” While it is generally accepted that policy influence processes are complex and involve long lags, new

primarily for policy makers. Also, citations generally take years to materialize. Finally, it should be noted that citations were recorded using Google Scholar, which is a free tool that may suffer from gaps due to lack of indexing.

methods for rigorously tracking contribution to policy uptake and changes from research are available and continue to emerge in policy evaluation practice. A “think and do” tank like IPPA is ideally positioned to leverage these methods for a more systematic assessment of its policy impact. Some suggestions are made under recommendations.

1.3 Assessment of research projects’ sustainability

- **This program has helped IPPA build a niche as a credible provider of knowledge on economic policy, and further strengthened its position as a reputable evidence-based institution. IPPA and its faculty can continue to leverage networks and credibility with policy-makers for sustained influence.** An external respondent noted that the research compendium represents a unique addition of context-relevant knowledge in a region where economic policy is generally under-researched and too reliant on Western models with limited applicability to the region. Along the same lines, an internal respondent noted: “to be able to discuss something with credibility and get requests for inputs from policymakers, we need to first produce something credible”. During interviews, a number of anecdotes were shared that point to UCA’s unique ability to reap the benefit of this program for years to come. For instance, one respondent pointed out that UCA’s working papers are heavily cited in Richard Pomfret’s *The Economies of Central Asia*, which is widely used as a key reference textbook for economic faculties at universities across the region. The same informant reported that UCA’s share of research on economics in the region is large and increasing. This in turn creates ideal conditions for the knowledge produced by this program to indirectly influence education at universities that train the region’s future leaders. Reportedly, two lead researchers involved in the program also sit on a research advisory council at the Central Bank of Kyrgyzstan, which gives them a unique vantage point to discretely influence the research priorities of this pivotal institution.

2. Executive Master in Economic Policy and Certificate Program in Economic Policy

EMEP and CPEP are treated in this report as the same output given the extensive linkages and cross-fertilization between the two. However, the two offerings are also unique in scope and ambitions and where relevant, this section comments separately on each of them.

2.1 Assessment of the CPEP and EMEP design and delivery

- **The program’s relevance is well established, especially for Afghanistan.** UCA staff noted that they face increasing demand for training on evidence-based policy making in the Central Asia region, which underpinned the decision to launch these new programs. In Afghanistan, the idea of an EMEP is the direct result of discussions between senior leadership at UCA and Afghanistan's Ministry of Finance (MoF) and an outgrowth of a previous Certificate in Policy Analysis offered by UCA with previous IDRC funding. In partnership, UCA and the MoF agreed that an executive master’s, a prerequisite for recruitment to the higher ranks of the civil service, would help elevate the skills of mid-level personnel and position them to better support director-level staff. This would ultimately create endogenous policy capacity that would decrease reliance on external advice and donor preferences. An informant suggested that “traditional forms of capacity building have not yielded the expected returns for the MoF and Afghanistan in general”. The EMEP therefore drew from past lessons by better focusing on on-the-job and job-

relevant learning, longer time-frames for knowledge assimilation and systematic assessment of learning.

- **IPPA designed coherent and comprehensive economic policy courses combining knowledge and skills development with opportunities for applying theory to practical projects.** A review of the EMEP syllabus suggests that courses covered relevant topics in economic policy including economic theory for policy analysis, public finance, trade policy, agricultural policy, climate change and poverty, extractive industries, labour market and human resource development policies. These sectoral knowledge modules were interspersed with cross-cutting skills development modules that covered the policy process, methods of policy analysis, statistics and quantitative methods, and policy and program monitoring and evaluation. Participants were also offered opportunities to apply knowledge through group capstone projects and research seminars to write policy papers. As for the CPEP, a review of the syllabus suggests that this course placed a stronger focus on policy areas than skills-development, given more limited time, but opportunities for applying learning through research seminars and capstone projects were included. Faculty involved in both courses also explained that the CPEP was built on the EMEP blueprint, remodulating content to cater to the specific needs of target countries and to adjust to the lower credit required for a CP. Interviewees that served as faculty for the EMEP and CPEP confirmed that their overall structure worked well. One lesson that IPPA learned in the course of implementation was that despite efforts to check basic skills in mathematics, some EMEP participants were weak in this area. It therefore decided to offer an intensive nine-day maths refresher course delivered in Kabul by an Afghan academic. Going forward, interviewed faculty suggested that it will be necessary to continuously revise course content to keep it relevant. One internal informant suggested that it is of paramount importance to “introduce a module on health economics, an important issue that has been made more urgent by the current coronavirus crisis”.
- **The program was overall clearly conceptualized and explained to participants through course and module overviews which generally align with best practice in teaching and learning.** The EMEP syllabus provides participants with a brief description and topics for each module, required credits, a list of instructors and their qualifications, expected learning outcomes, required readings and other relevant prerequisites. Where it was possible to access a module-specific overview,²⁵ this provided additional information about format and expectations, evaluation and grading policy, a breakdown of content, including what content was administered online and in person.
- **IPPA mobilized a gender-balanced faculty, with relevant expertise to deliver the course, resorting to external experts only where needed.** A total of 7 faculty taught at the EMEP and CPEP, of which 4 were men and 3 women. To make the most of the insights of researchers that had led the bulk of the economic policy papers, IPPA mobilized a predominantly internal faculty with 5 faculty being IPPA (senior) research fellow and/or (senior) lecturers, and two being responsible for a total of 5 IPPA research papers. Two external visiting faculty (1M/1F) were added to the courses on the basis of their ability to fill the knowledge gaps at IPPA. Faculty was supported by two female research assistants, both of which were IPPA researchers and staff.
- **Through its networks and partnerships with government counterparts and other policy institutes, IPPA recruited students who, on paper, were likely to be able to apply learning to their professional roles. But country-specific context factors influenced the breadth of**

25 The evaluator was given access to a more detailed overview of “Methods of Policy Analysis”, the module taught by Prof. Madina Junussova.

participants admitted into the courses. Across countries, selection was conducted through an open application process. Key requirements for both CPEP and EMEP included a relevant bachelor’s degree and ability to apply knowledge gained in professional roles. Selection process and criteria were however adjusted to each country’s specificities, as follows:

- In Kyrgyzstan, IPPA ran two rounds of CPEP between 2018 and 2019. It was able to leverage its extensive networks with government and civil society to admit into its two courses 78 participants from a balanced cross-section of society including relevant government agencies, international organizations, universities as well as the civil society or private sector organizations (see table 8). Government participants included staff at the Central Bank, Ministry of Labour, Ministry of Agriculture, Ministry of Finance, Ministry of Economy, National Institute of Strategic Investigations and the Academy of Public Administration under the President of the Kyrgyz Republic. Further, the vast majority of students admitted into the Kyrgyzstan CPEPs were women (58% for the first cohort, 77% for the second cohort and 67% overall), with one informant suggesting this is not unusual for courses in Kyrgyzstan, where women possess good access to educational and professional opportunities.

Table 8 – Professional affiliations of participants admitted into the Kyrgyzstan courses²⁶

	KG1	KG2	Total	% of total
International organizations	5	6	11	14%
Government	18	8	26	34%
Academia	4	9	13	17%
Other organizations	15	12	27	35%
Total	42	35	77	100%

- In Tajikistan, one course was completed with one currently underway. UCA obtained permission to run the course in the country only in late 2019, which compressed the delivery timeframe and meant that the second course had to be delivered for the most part online due to the coronavirus outbreak. A total of 48 students have been admitted in the two cohorts. The CPEP is offered in partnership with Institute of Public Administration (IPA), an entity under the President of Tajikistan, which is the sole institution in the country that has permission to train civil servants. While two informants confirmed that IPPA actively advocated for the inclusion of participants from civil society and other entities, creating some willingness on the part of IPA to open up participation to the second course, data suggest that the make up of the second course is still predominantly governmental, with all but one participant from government agencies. Government participants came from a wide range of relevant agencies including the Ministry of Finance, Ministry of Agriculture, Ministry of Economic Development, Ministry of Industry and New Technologies, and the Customs Service. The gender of students was balanced, with 44% being women for both courses.²⁷ Like for Kyrgyzstan, it was suggested that this balance is generally reflective of educational courses run in the country.

26 This table presents an evaluator analysis of data provided by IPPA. KG1 and KG2 stand for 1st and 2nd training cohorts in Kyrgyzstan. While there were a total of 78 admitted students into both cohorts, professional affiliation data was available only for 77 of them. For background on what is covered in the different professional affiliation categories in this table please refer to a previous footnote.

27 The first cohort included 9 (41%) men and 13 (59%) women. The second cohort included 16 (62%) men, 8 (31%) women and gender could not be assigned for 2 students admitted (8%). Overall 25 (52%) students were men, 21 (44%) were women and 2 (4%) could not be assigned.

- In Afghanistan, IPPA has built a strong partnership with the MoF, rooted in an MOU first signed in 2013 and renewed in 2017 to cover the delivery of the EMEP. The course was offered primarily to middle-management civil servants from the Ministry of Finance (MoF), which has overall responsibility of the country’s fiscal and economic policy framework, including overseeing the implementation of the country’s development budget. An open call for applications was circulated within the MoF, and by the MOF to other relevant ministries and departments, and selection was conducted by a committee consisting of MoF and UCA staff, and a representative of civil society. Final admission decisions rested with UCA. In addition to requirements mentioned above, English language and maths proficiency were assessed. While the bulk of participants came from the MoF, relevant civil servants from the national procurement office and Ministry of Economy were admitted to the course. The second course was also opened to National Technical Advisors (NTAs), Afghan nationals who receive salary support from international donors as an incentive to hold positions in the public service where salaries are low.²⁸ A small number of self-funded participants including from AKF-A were also included in the course (see table 9). A special effort was made to recruit female students. With women representing 8% of the total Ministry of Finance staff, it is encouraging to see that around 38% of civil servants admitted into the course were women. An informant noted the need to further strengthen selection, with actual testing of English and mathematical skills, areas of continued weakness for some participants, as well as a more thorough analysis of the relevance of individuals to the content taught and their ability to apply new knowledge in their professional roles.

Table 9 – Number, professional role and gender of EMEP students

	Year 1			Year 2			Overall		
	Total admitted	Admitted women	% of total	Total admitted	Admitted women	% of total	Total admitted	Admitted women	% of total
Civil servants	20	8	40%	20	7	35%	40	15	38%
NTAs	N/A	N/A	N/A	9	1	11%	9	1	11%
AKF-A	4	1	25%	3	1	33%	7	2	29%
Self-funded	1	1	100%	1	0	0%	2	1	50%
	25	10	40%	33	9	27%	58	19	33%

2.2 Assessment of CPEP and EMEP impact

- **End of course completion rates and grades provide a mixed picture across countries, with EMEP participants generally doing better at completing course requirements than their CPEP counterparts.** When looking at completion rates and grades the following can be noted (see table 10 for reference data):
 - In Kyrgyzstan, the majority of students did not complete their capstone projects and, therefore, did not receive a formal certificate, more so in the first than second cohort. Generally, the number of students who did not complete was equally high across gender groups and professional affiliations. Two informants commented that this should be seen in a context where students placed a higher value on access to learning and learning materials

²⁸ NTA were self-funded covering their travel, per diem and accommodation expenses with UCA providing tuition scholarships and partial funding of accommodation at the Naryn campus.

than obtaining a certificate, which is not a prized certification in the country. One of them commented that course participants are busy professionals and did not have time to complete capstone projects. This however raises questions on whether a program with a strong applied component is an appropriate response in the context of Kyrgyzstan. Informants from IPPA suggested that introducing a nominal fee to the course may create incentives at selection that will result in higher completion. Also, while the benefits of an open process were noted, seeking links to sponsoring institutions may create additional incentives to completion. In general, it should be noted that feedback from faculty is that Kyrgyz students were active and engaged learners and they demonstrated assimilation of content during the course. Grades for each cohort are provided in the data table, with men performing better than women overall.

- In Tajikistan, 73% of students graduated from the first cohort, the only one that was complete at the time of writing this report, with an average grade of 82. Women performed marginally better than men. There was mixed feedback on whether obtaining a certificate may have acted as an incentive to complete the course. One informant suggested that the stronger link to sponsoring institutions, via IPA, may have acted as an incentive to complete. Course faculty suggested that it was generally difficult to read the room and interact with participants given their overall reluctance to engage in discussions and ask questions, which may be reflective of the more restrictive political culture in the country.
- In Afghanistan, all except 1 student graduated²⁹, with women performing marginally better than men. The fact that an executive master's is a precondition for promotion within the state administration may have acted as a strong incentive to complete the course. Course faculty confirmed that participants were of good quality and engaged actively throughout the course. It should be noted that there was mixed feedback on the overall strength of the grading process. An informant suggested that exam questions were too simple to meet the requirements of an international executive master. Ultimately, it appears that IPPA had to strike a balance between rigour in grading and consideration of participants' pre-existing education and capacity gaps. There was also mixed feedback on the participation of NTAs in the second cohort. One informant suggested the need to review the decision to bring NTAs into the course because "they came with an expectation to obtain good grades" since they were footing most of their costs. Another interviewee stressed however that NTAs play a critical role within the government apparatus and they stand to benefit from the EMEP as much as permanent civil servants. The informant conceded however that given their contract arrangements, there is a risk NTA will leave their posts with investments in their capacity dissipating.

Table 10 – Students admitted vs graduating and average grades by course³⁰

	Graduation rate			Average grades (out of 100)		
	Admitted	Graduated	Percentage graduating	Avg grade – men	Avg grade – women	Avg grade - all
CPEP KG1	43	10	23%	82.99	80.69	82.53
CPEP KG2	35	14	40%	83.65	78.30	79.06
CPEP TK1	22	16	73%	81.62	82.94	82.42
EMEP 1	25	25	100%	83.51	83.99	83.70

29 Some students that did not complete all modules in year 1 were given an opportunity to complete as part of the second cohort. 1 student in the second EMEP, an NTA, did not graduate.

30 Average grades are averages of all modules and of all students that completed the course.

EMEP 2	33	33	100%	77.42	79.92	78.10
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- **Student evaluations point to appreciation for, and positive feedback on the courses. Where suggestions for improvement were noted, these appear to have been taken on board, and overall average participant program evaluation scores improved across cycles.** IPPA ran comprehensive and standardised end of course evaluations at the end of each term/course to solicit feedback from students on various aspects of student satisfaction. Table 11 provides average scores for each course, cohort, with breakdown by modules taught.³¹ Student comments are module-specific and range from satisfaction with learning materials, to suggestions for improvements to various modules and teaching methods. Grades generally seem to correlate strongly with the appreciation of teachers: where participants noted issues in teaching style, approach, behaviours or methods, these reflected in their overall appreciation of select modules. For instance, participants of the first EMEP course provided mixed feedback on the usefulness of the “Technologies and Innovation” module, which was ranked low and was later dropped from both EMEP and CPEP curricula. Also, overall average grades improved where courses were run across two cycles (from 4.08 to 4.31 points for the EMEP in Afghanistan, and from 4.27 to 4.42 points for the CPEP in Kyrgyzstan).

Table 11 – Analysis of student feedback by course type, cohort, and modules

Module	EMEP 1	EMEP 2	CPEP KG1	CPEP KG2	CPEP TJ1
Policy Process	4.25	4.40	N/A	N/A	N/A
Economic Theory for Policy analysis	4.25	4.47	N/A	N/A	N/A
Methods for Policy analysis	4.17	4.27	N/A	N/A	N/A
Policy and Program Monitoring & Evaluation	4.19	4.13	N/A	N/A	N/A
Statistics and Quantitative Methods for Policy Analysis	4.07	3.84	N/A	N/A	N/A
Public Finance	4.49	4.36	4.46	4.54	4.24
Trade Policy (AF, KG)/ Foreign Trade Economics (TJ)	4.41	4.64	4.42	4.39	4.20
Labour Market and Human Resources Development Policies (AF) / Labor Market and Education system (KG, TJ)	4.59	4.58	4.33	4.52	4.83
Agriculture (AF)/ State Policy on Agriculture (KG) / Agricultural Economics (TJ)	3.67	4.56	4.42	4.42	4.24
Extractive Industries (AF, TJ)/ Mining Industry (KG)	4.03	4.52	4.18	4.06	4.08
Sustainable Development Policies: Climate Change	4.00	3.66	3.99	4.57	3.99

31 IPPA shared with the evaluator raw evaluation data for all the courses it organized and had completed at the time of writing (the second cohort in Tajikistan is still underway and therefore not included in the analysis). For each module, students were asked to assign a score from 1 to 5 to the following 10 variables: i) *The module met my expectations*; ii) *The module gave me a body of knowledge and skills in economic theory that I did not have before*; iii) *Curriculum and the module packages were relevant to the context of my country*; iv) *Topics, which I was interested in, were covered in the course*; v) *I use (or will use) knowledge and skills gained from the module in my place of work*; vi) *Instructor*; vii) *Teaching method*; viii) *Curriculum*; ix) *Reading material*; and x) *Workload*. The scores for each module represent an equal weight average of these 10 dimensions. The overall average score is an average of all module averages. N/A indicates modules that were not included in the curricula of some courses (e.g., as mentioned before, the skills-building modules are only part of the EMEP, not of the CPEP). Further the names and content of some modules changed across courses and countries, and the table notes variations in naming providing in between brackets the code of the country where that module name variation was used.

and Poverty					
Technologies and Innovation (AF) / Industry policy: technology and innovation (KG)	2.79	N/A	4.09	N/A	N/A
Overall Average Scores per cohort (out of 5)	4.08	4.31	4.27	4.42	4.26

- **There are encouraging anecdotes on the use of new knowledge and content of capstone papers in participants’ professional roles but a more systematic assessment is needed over time.** Informants shared a number of stories of how participants used learning from the courses, especially from Afghanistan and Kyrgyzstan. These range from examples of capstone projects informing day to day work of participants, to participant perceptions that the course may have contributed to obtaining new employment or promotions. There was also mention of a student going on to pursue a PhD in the UK after the EMEP. Finally, a participant reported using content and methods from the CP to inform research on climate change and the impact of Covid-19 on livestock and farming within the framework of an international assistance program. These anecdotes are encouraging given the little time that has elapsed since the completion of the courses. Ongoing and better tracking on the part of IPPA is needed to determine to what extent students apply learning to their professional roles. In this respect, an informant noted in relation to the EMEP, that more can be done to ensure that capstone project focus better aligns with the needs of the country and their institution of origin.

2.3 Assessment of CPEP and EMEP sustainability

- **EMEP is now part of the GSD’s integral offerings.** In April 2019, UCA's Board of Trustees approved EMEP to become an integral part of the Graduate School of Development curriculum and to be offered on a recurring basis. In addition, IPPA is exploring the possibility to expand EMEP into a full master’s program, which would make it more palatable for potential learners from Kyrgyzstan and Tajikistan, where executive masters are not recognized. This said, resources are needed to run new editions of the course and informants reported that there are limitations in offering this master on a fee basis; as things stand, donor funding will likely be required to extend the program beyond the current phase.
- **IPPA has developed a strong partnership with the Afghan MoF which bodes well for the continuation of the EMEP.** Informants noted ongoing demand for the EMEP, not just within the MoF but also in other relevant government bodies and ministries. An informant shared that resolving the issue of the official certification of the EMEP degree in Afghanistan is key to making the course more appealing to civil servants (i.e. officially recognized courses entitle civil servants to remuneration increases) and potentially tapping into professional development budgets that are held at department level. This is a complex, procedural matter that IPPA has been trying to resolve. In addition, there is overall consensus between internal and external respondents on the need to move one or more terms of teaching to Afghanistan, by leveraging local expertise. This was already done for the preparatory phase of the second EMEP and could help create cost savings in future editions, by reducing the overall amount of travel to Bishkek.
- **Other impacts that are likely to continue beyond the program’s end include new networks, capacity to teach on economic policy issues and sustained use of knowledge in new partnerships and programs.** Two respondents noted that participants from CPEPs in Kyrgyzstan continue to interact with staff at the university and attend its public events. Faculty also emphasized that the P2I helped build capacity within UCA to teach on new issues. There were also incipient attempts to coach a local researcher in Tajikistan to teach a module with support

from UCA's faculty. It was noted that building links to national experts and positioning them to take over content over time may help UCA address an impending linguistic challenge it faces in the region, with new generations in Central Asia being increasingly less proficient in Russian. A similar model is being explored to run the module in statistics in Afghanistan, building on the positive experience of leveraging a local expert to teach a refresher course on mathematics. Finally, a respondent noted how content and background research from the course's module on policy M&E is informing dialogue and action with an important bilateral donor in Kyrgyzstan. While these are sparse examples, they do point to IPPA's increased readiness to leverage capacity gained through the P2I to support its broader strategies.

5. Recommendations

- On research projects:
 - Develop standardised research formulation and review process that clarify audience orientation of research, allow for group input and discussion and create accountability mechanisms for timely delivery.
 - Consider developing guidelines on gender responsiveness in research to complement the existing Ethics Review Committee guidelines.
 - Complete pending research that has been started under the P2I.
 - Continue exploring new opportunities and tactics for dissemination of findings from research papers, paying attention to channels, formats and media that are most suitable to deliver messages to policy makers.³²
 - Continue monitoring view, download and citation data of papers in the economic policy compendium to determine which factors may have favoured stronger use and uptake.
 - Track impact of research on policy debates via relevant evaluation methods such as outcome harvesting and contribution rubrics among others.³³
- On economic policy courses. If resources are identified to run new editions of the CPEP or EMEP:
 - Update content to reflect new global and/or country policy debates and emerging issues.
 - Respond to the specificities of each country's learning environment, focusing on formats and accreditations that create optimal incentives for students' completion of, and performance during, the course (e.g., resolving accreditation issues for EMEP in Afghanistan, and offering a master's program in other countries) and better linking content and knowledge application to the institutional needs of the entities that students hail from (e.g., capstone projects should ideally be decided in partnership with leaders and managers at sponsoring or recommending institutions).
 - Continue to address student feedback, including by gradually rotating faculty that received mixed feedback, and identifying new researchers and faculty that can over time be trained to effectively teach modules at the national level, when relevant in national languages.
 - Further strengthen selection by adding objective testing methods that can help assess students' overall mathematical and economic preparation, and ability to learn in the language of the course, deploying ancillary support such as refresher courses with entry

32 A number of articles and studies on effective strategies to use research for policy influence have been published lately including the work of David Evans, senior fellow at the Center for Global Development, i.e.,' ["Make Your Research Known"](#) or ["8 Lessons on How to Influence Policy"](#).

33 For a seminal overview of approaches and tools used in policy influence evaluations, consider Tom Aston's ["Bricolage and Alchemy for Evaluation Gold"](#).

exams that ensure students possess an even minimum baseline of knowledge and skills to make the most of the course.

- Regularly collect evidence on the application of learning on the job and how it may have supported career or academic progression over time (e.g., via alumni surveys) and distil findings for internal learning and to support fundraising efforts.

2. Assessment of “Objective 2 – Strengthen mathematics teaching skills and increase gender responsive pedagogy in north-eastern Afghanistan” (SPCE component)

This section of the report covers work under objective 2 of the P2I program, which was led by UCA’s SPCE (SPCE thereafter). This includes output “Output 2.1.1. (a) Mental Maths” (MM in short) and “Output 2.1.1. (b) Gender responsive pedagogy and learning environment” (hence forth referred to interchangeably as Gender pedagogy or GRLE).

This section covers in order:

- Cross-cutting considerations on the design and implementation of both outputs under this component.
- Considerations on output “output 2.1.1. (a) Mental Maths”, including assessment of its delivery, impact and sustainability.
- Considerations on output “Output 2.1.1. (b) Gender responsive pedagogy and learning environment”, including assessment of its delivery, impact and sustainability.
- Cross-cutting considerations on the results and sustainability of both outputs under this component.

1. Cross-cutting considerations on the design and delivery of the Mental Math and GRLE programs

- **The program solutions are well rooted in academic research and aligned with the national development and education priorities of Afghanistan.** SPCE provided access to background research and analysis that provides a strong conceptual backing to the solutions implemented through this component. Specifically, the National Education Strategic Plan for Afghanistan designated ‘increasing access to education for female students across levels of education’ as the first objective under its General Education pillar, and made curriculum development and teacher education for science and technology one of its three priority programs.³⁴ A number of relevant studies and articles were also shared by SPCE that demonstrate that Mental Maths training sharpens memory and increases the ability to perform mental calculations.³⁵ Other studies showed that a gender lens in pedagogy can help increase access and learning outcomes for girls.³⁶ This said, UCA noted in its proposal a lack of applied research or data on how educational outcomes, and specifically girls’ achievement in maths, can be improved in the Afghanistan context specifically. Therefore, it suggested undertaking two foundational case studies to inform

34 Afghanistan Ministry of Education (2010) National Education Strategic Plan for Afghanistan 2010-2014.

35 E. R. Sarvari et al., “The Impact of Abacus on Mathematic Learning through Teachers Innovative Behavior in Elementary Schools in Iran”, *European Journal of Business and Management*, Vol.7, 2015; G. Price et al., “Why Mental Arithmetic Counts: Brain Activation during Single Digit Arithmetic Predicts High School Math Scores”, *Journal of Neuroscience*, January 2013.

36 Dossa and Roy, “Girls’ education in Afghanistan: complexities of context and the need for innovation: a case study of the Flexible Response Fund”, in Ashraf, D., Tajik, M. A., & Niyozov, S. (Eds.), *Educational policies in Pakistan*, 2017.

program responses. According to an informant³⁷, these case studies, which were to be delivered by MSRI, were not completed due to security issues that prevented travel to the country. It is unclear if more could have been done to deliver these case studies differently. While this is a missed opportunity, the program has generated important data that provides an opportunity for further analysis and context on the impact of gender pedagogy and MM on girls. Some recommendations to this effect are offered later in this section.

- **The program follows a unified intervention logic with synergies between the two components:** while the two components of the program focus on different topics and aspects, they are governed by a unified vision of empowering girls and women, including with greater mathematical skills that are central to personal and professional growth. Also, links and synergies between components were established. Reportedly, all the participants of the MM program have been exposed to GRLE seminars. Further, the all-female teaching body of the MM component sent powerful signals in terms of the status and opportunities that women can aspire to, which acted as a tangible reinforcement to the gender pedagogy component. Some illustrations of this are provided later in this report.
- **SPCE has established solid participant data collection and management.** SPCE has developed a comprehensive participant database, which enabled a uniform and comprehensive tracking of performance and demographic data for the large number of beneficiaries that benefited from MM and GRLE seminars. This has in turn been of high value to inform monitoring and evaluation efforts, including this evaluation. It overall represents a blueprint of effective monitoring data management and evaluation readiness, that could be adopted by other UCA entities involved in the P2I program and the university more broadly.
- **A Facebook page, with good following, was created to disseminate information about the program. More could have been done to use it to share program results and as a channel for sharing resources and amplifying learning.** SPCE created a [Pathways to Innovation Facebook page](#) to disseminate information about MM and GRLE activities. 1,917 people follow the page with some level of engagement. While the page is a useful information sharing tool and an example for program transparency, it has only been leveraged to share information about past and future events or graduation ceremonies. More could have been done to use the page to share results – only one success story was shared recently – and to disseminate learning resources in Dari (e.g., materials used, videos from sessions, MM videos) in order to amplify learning beyond the in-person seminars held by SPCE.

2. Mental Maths program

2.1 Assessment of the design and delivery of Mental Maths program

- **SPCE recruited a reputable firm to design the MM curriculum and provide training to its instructors.** SPCE commissioned Akademia Rosta, a leading provider of mental arithmetic training in Kyrgyzstan and an existing SPCE partner, to develop a solid MM curriculum, comprising 9 modules, with a syllabus outlining content, number of hours per module and mixing theoretical concepts with practical work and ongoing testing to consolidate learning. The curriculum follows a blended learning approach, with 96 face-to-face academic hours

³⁷ Note that informants for the SPCE component of the program were all internal. No interviews with external informants were held due to the existence of solid participant data, the challenges of holding interviews in English with beneficiaries and limited time available for undertaking additional surveys of participants.

and 72 hours of online content. Akademia Rosta also provided its Abacus software to facilitate blended learning as well CD-ROMs and books for participants to support learning at home, even where participants could not access internet. It also provided training to the SPCE program lead and three Mental Maths instructors in Bishkek over 25 days starting in March 2018.

- **Three instructors were recruited and trained to teach MM. Importantly, all of them are women.** Through an open application process, SPCE recruited three instructors, one per TTC, sourcing applications from the communities where the TTCs are based: Ishkashim, Shughnan and Darwaz. Interviewees report that they received 40 applications for these roles and panel interviews and tests were held to select the final candidates. Encouragingly, the three instructors ultimately hired were all women. This served as a useful example for women empowerment, with an informant noting that “it was important for women and girls in the classroom to see that a woman can be a teacher”.
- **SPCE exceeded its program targets by training 182 individuals, with 172 graduating from the course, of which 77% were women.** An analysis of data from SPCE’s participant database show that SPCE delivered 17 cycles of the program across the TTCs between April 2018 and March 2020, with each cycle lasting around 6 to 7 months. A total of 182 participants were targeted, with 172 graduating from the course, 7 failing and 3 withdrawing. As shown in table 12, 77% of graduates were women, which exceeds the initial log-frame target of 65%. Most graduates were in the 19-25 age group, as shown in table 13.³⁸ Informants suggest that trained individuals were mostly TTC students, as per the initial design, but a limited number of instructors at TTCs were also included to spread learning within TTCs. It is worth noting that SPCE reached its targets well ahead of the program’s no-cost extension and that from January 2020, it has shifted focus on directly training students aged 7 to 14, pointing to a continuation of the program and higher delivery targets than captured in the data offered in this evaluation report.³⁹

Table 12 – MM program targets vs graduating students, with gender breakdown⁴⁰

Target group	Target for # of participants	# of participants that graduated	# of women	# of men	% of women
Ishkashim TTC	N/A	73	55	18	75%
Shughnan TTC	N/A	56	35	21	63%
Nusai-Darwaz TTC	N/A	43	43	0	100%
Subtotal for all TTCs	120	172	133	39	77%

38 It should be noted that 18 is the entry year for TTCs. It is natural that few students were below 19 years of age, with most being between 19 to 25.

39 The data contained in the database shared by SPCE do not include most recent cohorts targeting students age 7-14, from January 2020 onwards. Hence, these were not included in any of the analyses in this report.

40 These data have been drawn from the program log-frame and SPCE’s participant database.

Table 13 – Age groups of students graduating from MM program⁴¹

	(# of students) <19	19-25	>25
Ishkashim TTC	11	59	3
Shugnan TTC	9	34	13
Nusai-Darwaz TTC	5	38	0
Total	25	131	16
Age group as % of total participants	15%	76%	9%

2.2 Assessment of Mental Maths program impact

- **SPCE conducted a rigorous, externally-led evaluation of its MM program, which shows significant gains in learning.** An evaluator analysis of the data for all graduating participants show that participants who passed the course did so with an average grade of 81 (or “B”) with no discernible differences between men and women.⁴²

Table 14 – Completion rates and distribution of MM post-seminar test grades for course graduates with gender breakdown.

Score (out of 100)	Grade	# and % of graduates obtaining this grade	# and % of female graduates obtaining this grade	# and % of male graduates obtaining this grade
91-100	A	34 (20%)	25 (19%)	9 (23%)
75-90	B	85 (49%)	69 (52%)	16 (41%)
61-74	C	53 (31%)	39 (29%)	14 (36%)
Total who passed		172	133	39

These insights should be interpreted against the findings of an interim, externally-led and statistically more rigorous evaluation⁴³ of learning effected by the program, commissioned by SPCE. This evaluation covered only the first 2 years of the program, or 14 of the 17 cycles of the program, for a total of 130 out of 172 graduates. The assessment measured student knowledge through testing on theoretical issues and solving mathematics problems at the beginning (baseline) and at the end of the course (end line). This included 207 mathematics tasks, covering the 9 modules of the training program, and use of different mathematics tasks that did not replicate between baseline and end line but had the same level of difficulty. The report highlights, among others, the following:

41 These data have been drawn and analysed using SPCE’s participant database.

42 Men scored on average 81.13, while women scored 80.54.

43 *Summary Knowledge Assessment Report – Students Of The «Mental Mathematics» Course – 2018-2019 Academic Years*

- There is a weak correlation between formative assessments and test results (i.e., students that received high grades from MM instructors based on classroom performance did not perform as well in solving mental mathematics tests).
- The average final score at end line amounted to 75.4 points (a “C”). This compares to a baseline score of 23.7, that is, an increase over the training period of 51.7 points.
- The standard deviation decreased by 4.5 times between baseline and end line. This indicates that low-performing students improved their grades and caught up with the high-performing ones.
- At baseline, the older the students, the more tasks they solved correctly. At end line, there were no statistically significant differences by the age.
- Slightly higher results were achieved by male students. The final average score for men was 79.5 points, and 74.8 points for women, while differences in results by gender were not observed at baseline.

The approach used in assigning grades in the interim evaluation was different from that used by SPCE in determining final student grades: SPCE used the formative assessments conducted by teachers and final exams conducted at the end of the course to assign final grades, while the interim evaluations calculated grades on the basis of tests conducted after each module, with a lower weight for formative assessments. This explains differences in the analyses presented above in terms of gender performance, with insights from the interim evaluations to be regarded as more rigorous in terms of actual performance, with lower weight given to formative assessments, which may include some element of bias.

- **Despite anecdotes of use of mental arithmetic in teaching, community and family life, more data and analysis is needed to gauge the extent of application of knowledge in participants’ professional roles and personal sphere.** One informant reported that students of the MM program shared that they are using Mental Maths knowledge in their daily lives, including within their families, or in their workplace. One success story has also been recently shared on the Facebook page, with a female MM seminar participant describing how SPCE support was important in obtaining a new job.⁴⁴ While encouraging, more data and comprehensive analysis is needed to gauge the extent of use of Mental Maths. SPCE reported that the TTCs maintain data on students’ career progression after graduating from TTC program. This data could not be easily gathered due to the evaluation’s compressed data collection timeframe. However, analysing how many of the program’s students went to find employment, and assessing how many of them are using it in their roles as teachers, or other employment they found, would provide a stronger evidence base on the impact of the program. SPCE can rely on strong participant data to track use going forward and engage in research that demonstrates the distal impacts of Mental Maths among its target areas. Some suggestions are made under recommendations.

2.3 Assessment of Mental Maths program sustainability

- **Equipment purchased for the MM program continues to be used to support the work of SPCE and TTCs.** A number of physical assets were purchased to deliver the program,

44 See Success story posed on 11 July 2020 on <https://www.facebook.com/Pathways2Innovation/>

including laptops, a professional camera, printers and scanners. Informants suggest that these continue to be used for filming of TTC ceremonies, and testimonials of participants.

- **SPCE has created and uploaded on YouTube a suite of videos to disseminate learning beyond the program.** A professionally filmed compilation of videos in Dari is publicly available on [YouTube](#) since January 2018, with all the course instructors covering elements of content. At the time of writing this report, the channel totalled 2,333 unique views. This suggests that the videos have been accessed by a higher number of learners than those targeted in the program, pointing to a significantly wider reach.⁴⁵ As further outlined under cross-cutting considerations, there is little evidence of active dissemination to other development players that could realistically use these videos in their programming. This means that there may be untapped opportunities to further increase the use of this terrific online resource.

3. Gender Responsive Learning Environment (GRLE)

3.1 Assessment of the design and delivery of the GRLE program

- **After setbacks in recruiting local gender specialists, SPCE successfully adapted its strategy by leveraging international expertise to build new internal capacity to deliver this component of the program.** Despite issuing two open calls for application, SPCE found it difficult to identify qualified gender specialists in Afghanistan to hire as instructors. Ultimately, with AKF-C support, it opted to issue an international call to recruit a qualified gender specialist, who developed a gender responsive pedagogy training manual and delivered a training of trainers session to a cohort of 10 local instructors with an interest to broaden their teaching to gender pedagogy. This included a lead trainer and co-lead, recruited through open calls specifically for the program, as well as 8 existing SPCE staff currently teaching on other topics (i.e. English, accounting, and IT). It is of note that all the trainers are male. SPCE informants explained that women were shortlisted and interviewed, with some making it to the final round of selection. SPCE informants explained that hiring was guided by candidates' performance and training qualifications and acceptance of the risk of travelling to high-risk areas. Unlike the MM instructor roles, the GRLE trainer role required travel from Badakhshan, where the trainers are based, to remote areas, which may have created significant security risks for female trainers. They further shared in hindsight that having men as messengers of gender issues, helped them win over the more conservative elements of society. As a case in point, an informant reported that one of the instructors is a mullah, which helped the program gain traction and legitimacy within the highly religious communities SPCE targeted, especially in Darwaz. When probed on potential drawbacks from not having any female trainers, SPCE noted that it experienced no significant challenges. It is overall difficult to assess on the basis of available information if more could have been done to include at least a female trainer, including by providing adequate support for travel to high-risk areas.
- **The gender pedagogy manual and training of trainers covered important topics in gender pedagogy and provided effective guidance and tools to trainers and for learners.** The manual covers key topics in gender pedagogy and in gender responsive learning environments. It includes comprehensive guidance and tools for gender trainers to

45 It is unlikely that all participants registered in the MM could access online videos, due to internet limitations.

discharge their role effectively (these include learning objectives, training methods and materials, hints for trainers, overviews of session activities, session times, a glossary of key concepts, and session handouts and tools). There is a heavy emphasis on practical activities that actively involve learners in the learning journey. Informants were overall satisfied with the training and guidance provided. The tools provided included a test that was used to assess participant learning before and after each seminar.

- **SPCE exceeded its planned target for the program and trained a total of 1127 individuals, reaching more women than men with its seminars.** SPCE conducted at least 29 seminars over the course of three years, with some still ongoing at the time of writing. The distribution of academic hours was adjusted during the course in response to participant feedback: the initial seminars covered 15 academic hours over the course of 3 or 4 days (i.e. 3 or 4 hours per day). Later seminars covered 15 academic hours over 7-8 days (i.e., 2 per day), with fewer hours per day to meet the professional needs of participants, especially at Badakhshan University. Further, in response to the restrictions caused by the Covid-19 crisis, seminars are currently being held online, in a webinar setting, with more participants yet to graduate from the course. Table 15 summarizes planned and completed targets. SPCE data shows that it has exceeded its overall target, by training 1127 teachers, students, school/university administrators and other relevant individuals, thus largely exceeding the initial target of 1000. Some variations are however observed in sub-targets, with SPCE exceeding its targets for Badakhshan University and Remote Area Schools, with fewer than planned individuals trained at teacher training colleges. Also, women constituted a notable majority of participants, 59% of the total.⁴⁶ The majority of participants, around 60%, were in the 19-25 age group as shown in table 16.

Table 15 – GRLE program targets vs admitted students, with gender breakdown⁴⁷

Target group	Planned	Admitted	Women	Men	% of women
Ishkashim TTC		256	165	91	64%
Shugnan TTC		144	105	39	73%
Nusai-Darwaz TTC		124	93	31	75%
Subtotal for all TTCs	750	524	363	161	69%
Faizabad - CEU – BU	100	336	182	154	54%
Remote Area Schools	150	267	120	147	45%
All participants	1000	1127	665	462	59%

46 SPCE noted that female participation was lower for remote areas schools since the majority of teachers, managers and administrators at these schools are men.

47 These data have been drawn from the program log-frame and SPCE’s participant database.

Table 16 – Age groups of students admitted to GRLE⁴⁸

Target group	(# of students) <19	19-25	>25
Ishkashim TTC	7	187	62
Shugnan TTC	2	66	76
Nusai-Darwaz TTC	25	80	19
Faizabad - CEU - BU	1	253	82
Remote Area Schools	79	79	83
Total	114	665	322
Age group % of total	10%	60%	29%

3.2 Assessment of the GRLE program impact

- **The vast majority of participants passed the final test, with post-seminar test grades showing learning gains against the baseline data, especially for women.** SPCE reports administering pre- and post-seminar tests to assess learning from all the seminars it organized, using a standardized evaluation form. An analysis of SPCE’s participants’ database shows that 94% (or 1060) of all the individuals admitted to the seminars passed the course, with grade distribution outlined in table 17.

Table 17 – Completion rates and distribution of GRLE post-seminar test grades, with gender breakdown

Number of participants passing	1060	94%
Number of participants failing	67	6%

Score (out of 100)	Grade	# and % of participants obtaining this grade	# and % of female participants obtaining this grade	# & % of male participants obtaining this grade
91-100	A (Pass)	204 (19%)	102 (15%)	102 (22%)
75-90	B (Pass)	474 (45%)	277 (42%)	197 (43%)
61-74	C (Pass)	382 (36%)	247 (37%)	135 (29%)
51-60	D (Fail)	37 (3%)	23 (3%)	14 (3%)
45-50	E (Fail)	19 (2%)	10 (2%)	9 (2%)
<45	F (Fail)	11 (1%)	6 (1%)	5 (1%)

48 These data have been drawn and analysed using SPCE’s participant database. SPCE provided some initial data and some formula corrections were introduced. Very few entries in the database did not include age data and this analysis is based off data for 1101 participants.

Further, when comparing against baseline data, as per table 18, data show significant gains across the trained cohort, with average grade for all participants going from 35.04 (an “F”) to 77.31 (a “B”). Data suggests that women started with a lower average score than men but their average score almost caught up with that of men after the course, with women improving their average score by 43.71 points vs. the 40.12 points of men. Data also show that low performing students at baseline caught up with the high-performing ones by the end of the training, as shown by the reduction in the dispersion in the sample, with the standard deviation of the population going from 20.26 points at baseline to 13.59 at end line.

Table 18 – Average scores and dispersion of sample at baseline and end line.⁴⁹

Variable/ subgroup	Pre-test grade (out of 100)	Post-test grade (out of 100)	Difference between pre- & post-average grades
Average score – all	35.04	77.31	42.27
Average score men	38.05	78.16	40.12
Average score women	32.98	76.69	43.71
Standard Deviation of the entire population	20.62	13.59	

- **Informants shared interesting anecdotes of changes in gender dynamics pointing to shifts in attitudes as well as more supportive family and community environments. But longitudinal analysis is needed to more comprehensively and rigorously capture the extent of changes over time.** Informants shared how they observed tangible changes over the course of the program, including in the most conservative region of Darwaz. For instance,
 - The organizers were able to obtain participant consent to take pictures or film at the events in later intakes of the program, after gradually overcoming reluctance by women to be filmed out of fear of retaliation from their families and winning the support and approval of communities they were working in. The program is currently running online sessions that see good participation from women, which was regarded as an achievement by informants.
 - In the early stages of the program, female students of Mental Maths training would for the most part come dressed in *burkas* or wear dark sunglasses in Darwaz. After being exposed to GRLE training (and the example set by the women MM instructors), an increasing number of women in later intakes began not to wear burkas or sunglasses in classrooms.
 - In later stages of the program, SPCE succeeded in positioning a female participant to deliver an address on behalf of graduating students, something that was regarded as unthinkable at the start of the program.

⁴⁹ These data are the result of evaluator analysis on the basis of data provided by SPCE. No interim evaluation of the GRLE was conducted by SPCE and this analysis does not carry the same statistical rigour of the analysis and results contained in the MM interim evaluation, outlined earlier in this section.

- During events, family members shared their appreciation to the organizers for the education given to them and their daughters by the program. One interviewee reported how a family father shared that he would encourage his daughter to take the entry exam for university, after being exposed to GRLE seminar.

While these anecdotes are encouraging, all the more in the challenging contexts of the rural regions targeted by the program, a more comprehensive assessment is needed to measure the extent of attitude and behavioural changes, which is deemed beyond the scope of this evaluation. Some suggestions are offered under recommendations.

3.3 Assessment of the GRLE program sustainability

- **SPCE has built important capacity to deliver gender responsive pedagogy in a last way.** The decision to associate 8 existing SPCE instructors to the gender pedagogy training of trainers, in addition to two trainers specially recruited for the program, adds significant capacity to SPCE's ability to deliver gender pedagogy training in the future and shields against loss of capacity from possible staff turnover or lack of funding to renew the contracts of the trainer and co-trainer. These instructors were actively associated not just to the TOT but also in supporting the delivery of trainings under this program, thus consolidating learning with applied practice. This bodes well for SPCE's ability to run gender trainings in the future.

4. Cross-cutting considerations on the sustainability of the Mental Maths and GRLE programs

- **Through partnerships with three Teacher Training Colleges, the program has provided important support to the operation of local institutions.** SPCE has established its learning centres within TTCs, the key bodies mandated with teacher training in Afghanistan, and in the process leveraged their local presence, mission and facilities to support MM and GRLE training efforts. SPCE has covered a number of costs, including repairs, equipment, electricity and internet, extending their use to the whole TTC offices, thereby strengthening their operational backbone. SPCE appears committed to continuing and deepening these partnerships, which bodes well for the sustainability and efforts of institutions that are critical pillars of education in northern Afghanistan.
- **The partnership with AKF-A provides a sustainable avenue to advocate for the inclusion elements of Mental Maths and gender responsive teaching in the official curriculum set by the Afghan government. But the jury is still out on whether this will bear results.** Informants suggest that SPCE shared regular insights on the impact and limitations of integrating Mental Maths and GRLE in the curricula of TTCs with AKF-A' education program, who, in turn, used it to inform its advocacy vis-a-vis the Ministry of Education and dependent departments. One informant was optimistic about the eventual inclusion of gender responsive pedagogy while another was more sceptical given the huge challenges facing education in Afghanistan. The prospects for the inclusion of MM curricula were regarded as limited.
- **Changing gender dynamics in Afghanistan requires ongoing focus and SPCE is well positioned to continue efforts, more effectively leveraging partnerships with other development organizations to extend the reach of its MM and GRLE training.** During informant interviews, it was suggested that changing gender dynamics and improving

arithmetic literacy in Afghanistan will require long term focus and efforts. In this vein, one informant suggested continuing efforts on Mental Maths by directly targeting pupils. Another suggested that there are opportunities to broaden SPCE programming on gender by developing anti-harassment or gender sensitivity training for employers. This would require a different curriculum but it looks like a promising avenue for running revenue-generating courses with a gender equality focus, reaching a potential new target. Furthermore, while SPCE has already shared the GRLE curriculum with AKF-A for use in their programs, it could go one step further by designing and publishing the manual and its tools as SPCE products, similarly to what it has done for the MM curriculum, and actively disseminating them, at NGO and government forums and to organizations in Afghanistan that have programming on gender equality. It could also consider offering gender pedagogy training for a fee. This could generate revenues for SPCE, amplifying the reach of the program, and ensuring that its knowledge base is used more widely, including by organizations with programs in parts of Afghanistan that are currently not under SPCE's geographic purview.

5. Recommendations

- Should the program be run again, consider options to recruit female GRLE trainers, including by providing adequate travel support to minimize risks that may come from travel or focusing their work in areas where security risks may be more limited.
- SPCE could leverage its existing data to track the ongoing impact of MM and GRLE on gender attitudes of men and women. This may require longitudinal analysis of participant performance, employment outcomes, or studies of perceptions and attitudes towards girls and women in target communities. This could inform the development of research that fills the evidence gap on the impact of such programs in Afghanistan and help position SPCE to be a leading provider of research and practical support on these issues.
- SPCE can do further justice to its achievements under the program by more actively disseminating the excellent learning resources it has created and leveraging the multiplier effects of partnerships. This could include,
 - Copy-editing, designing and publishing gender pedagogy manual and tools, for third-party use under copyright.
 - Leveraging the good following of its Facebook page to disseminate all the learning resources it has created.
 - Creating a new Facebook page in Dari to facilitate access to its learning resources by the vast majority of Afghans who cannot read English.
 - Mapping out development organizations undertaking, or with an interest in, MM and GRLE and engaging in exploratory discussions on how they could use SPCE materials and opportunities for collaboration.
- Without an official mandate to cover MM and GRLE or inclusion in state curricula, teachers may find it hard to integrate these topics in their teaching practice. Therefore, it appears critical to continue working with the AKF-A, the General Directorate of TTCs and other players active in the education ecosystem to explore the possible inclusion of key concepts covered by the program, with priority going to GRLE given the high prominence equal opportunities occupy in the government's education plans.

- Consider the trade-offs of targeting its MM programs directly to children, as opposed to continuing to focus on knowledge intermediaries (e.g., teachers but also parents etc.). While targeting children may bring immediate and more tangible wins, it would require a scaling out of the program's resources. Targeting intermediaries may continue to represent a cost-effective alternative as long as there are assurances that those intermediaries will go on and use this new knowledge in their interaction with children.
- In the pursuit of new funding to continue running the program, consider a mixed fundraising strategy that includes, beyond support from donors, offering some services at a fee to those players that can afford to pay for SPCE support (e.g., private sector organizations, international NGOs etc.). Among others, this could include training other organizations to use the GRLE manual, partnering with Akademia Rosta to offer a joint MM package tailored to Afghanistan and Dari speakers, and/or opening courses to individuals who can pay for them.

3. Assessment of “Objective 3 – Strengthen science capacity through the development and support of trans-disciplinary environmental research in Tajikistan and Afghanistan” (MSRI component)

This section of the report covers work under objective 3 of the P2I program, which was led by UCA’s GSD MSRI (MSRI, thereafter). This includes output “3.1.1: Research design and delivery” and output “3.1.2: Design and delivery of a Certificate Program in Natural Resource Management” (CPNRM).

This section covers in order:

- Cross-cutting considerations on the design and implementation of both outputs under this component.
- Considerations on output “3.1.1: Research design and delivery”, including assessment of delivery, impact and sustainability.
- Considerations on output “3.1.2: Design and delivery of a Certificate Program in Natural Resource Management”, including assessment of delivery, impact and sustainability.
- Cross-cutting considerations on the results and sustainability of both outputs under this component.

1. Cross-cutting considerations on the design and delivery of objective 3 outputs (CPNRM and MSRI-supported research projects):

- **Informants suggested that the MSRI-led program was highly relevant to the needs of participants, partner universities and the contexts of mountainous regions of Afghanistan and Tajikistan:** Both internal and external interviewees concurred that the program, in its initial design and actual implementation, responded to the unique peculiarities and needs of mountainous regions of the target countries and was developed and adapted in collaborative fashion with partner universities and other supportive stakeholders in target countries (e.g., AKF-A).
- **Participants emphasized the unique applied value of MSRI’s support.** External interviewees noted that education and research in their countries and home institutions tend to be theoretical in nature. The unique value of the CPNRM was to combine theoretical elements with applied research practice, including site visits and group research projects. One participant noted during interviews that the idea of group research could be taken to the next level by providing students with financial support and more time than three weeks to produce publishable research. Similar comments were made in relation to the research projects. A recipient of research support noted: “there is hardly any research budget available from my university or the central government in Afghanistan. I rarely do field research and the type of applied experiments I conducted as part of the MRSI research project were new and very useful”. They also stated that it is ultimately only applied research of this nature that can help the university support the country’s developmental ambitions in a tangible manner.
- **There is evidence of synergies and cross-fertilization between the CPNRM and research projects, with some limitations:** the sequencing of new research and the CPNRM provided room for synergies between the two MSRI-led components. The identification of research topics partly informed to some extent the focus of the CPNRM curriculum. In turn, the CPNRM served as an

opportunity for carefully selected researchers to develop a more comprehensive conceptual framing on natural resource management, in a way that was supportive of research efforts they were leading or supporting. There is also some evidence of recipients of research support sharing preliminary findings and insights at national workshops organized as a follow up to the CPNRM. This said, the CPNRM focused *by design* on “macro” issues, while most projects focused on “micro” research initiatives with a tangible and applied focus on food security, which limited to some extent the linkages between the two. Informants do suggest however that researchers attending the CPNRM were able to integrate relevant learning in their research projects where there existed topical alignment.

- **Efforts were made to recruit participants and researchers of appropriate calibre, who would benefit from MSRI support, with an eye to partner institution and gender balance; these efforts paid off but overwhelming male composition of faculty at partner universities in Afghanistan impacted efforts to recruit female participants and research leads and called for alternative gender targeting strategies.** CPNRM participants and research leads were recruited through open application processes, paying attention to their role, specializations and gender as well as objective criteria contained in application forms. Table 19 provides a university and gender breakdown of participants that attended the CPNRM⁵⁰. Overall, there was a good balance of representation across partner universities. Participants also hail from departments that stood to benefit from the course. When it comes to gender, participants from Bamyan and Badakhshan were all males. This is not surprising in a context where only 6% and 10% of faculty at those universities are women (see table 20). For Afghanistan, the program had to devise alternative gender targeting strategies, including by recruiting women from AKF-A, and by reaching additional women via national workshops, which is discussed later in this report. Instead, perfect gender balance can be observed in participants from KSU (3 women and 3 men), in a context where men at the faculty of Natural Sciences outnumber women (see table 20).

Table 19 – University and gender breakdown of CPNRM participants from partner universities⁵¹

Variable	Count	Percentage
Total participants (only participants from partner universities)	16	
Females	3	18.75%
Males	13	81.25%
Number of participants from Badakhshan University	4	25.00%
Number of participants from Bamyan University	6	37.50%
Number of participants from Khorog State University	6	37.50%

50 CPNRM participants included an additional eight self-sponsoring individuals from Aga Khan Development Network entities, including two more women (i.e. AKDN, AKA-Afghanistan, and MSDSP in Tajikistan). These are not included in the quantitative charts in this report, which exclusively focus on participants from the three partner universities.

51 This analysis is based on data provided by MSRI and includes only participants that attended all or most of the course.

Table 20 – Number and gender of faculty numbers at MSRI partner universities in Afghanistan⁵²

University	Total faculty no	% of women
Badakhshan University	118	10%
Bamyan University	159	6%
KSU (Faculty of Natural Sciences only)	36	41%

When it comes to research projects, informants suggested that the calibre of applicants varied and is aligned with the overall strength of the institutions that they hail from. When it comes to gender, all research leads are male⁵³. The vast majority of research applicants were however also males, with only two female applicants out of 18, both from KSU. A review of the MSRI project selection matrix suggests that one of the research proposals submitted by women was deemed outside the scope of the MRSI research support and another merged with a broader project at KSU that was funded. To address this imbalance, MRSI encouraged research leads to include female faculty and students in the research process as co-researchers or to support data collection and analysis. For a number of papers, research co-leads are women, particularly at KSU. Data provided from MSRI also suggest that just under 50% of research associates and students supporting the 11 research projects across countries were women.⁵⁴ A review of team composition data from various sources suggests that only research projects from Bamyan University and KSU involved women as co-researchers. Instead, all women supporting research projects at Badakhshan were students.⁵⁵ This is generally reflective of a lack of gender balance of faculty at this university.

52 The figures for Badakhshan and Bamyan universities are drawn from the Afghanistan Statistical Yearbook 2017-18, elaborated by MSRI. The figures for KSU were provided by MSRI. It should be noted that figures for KSU only refer to the faculty of Natural Sciences, the primary target of the program. When looking at the whole university, female faculty at KSU are more represented than men because KSU has a much larger topical remit, which includes social sciences and languages, disciplines where women on balance outnumber men. The reverse is observed in STEM faculties where men outnumber women.

53 MSRI shared after the data collection was complete that, after the passing of a researcher at KSU, its female co-lead took over one of the research projects.

54 These data were provided by MSRI and could not be objectively verified. External informants did however confirm efforts to associate women in their research projects.

55 Data from researchers progress reports suggest that female co-researchers were 3 out of 8 at KSU and 4 out of 13 at Bamyan University, with no female co-researchers in Badakhshan University projects. These figures are however from interim progress reports, which present data in an inconsistent manner. Further, the figures provided in these reports are inconsistent with the figures provided by UCA at the end of the program: UCA provided updated disaggregated only for Afghanistan-based universities, which record a lower number of co-researchers across both universities but similar trends in terms of women participation, with no women co-researchers involved in Badakhshan University projects.

Table 21 - Number and gender of co-researchers and students supporting research projects by university grouping

University	Males	Females	Total	% females
Bamyan University	29	21	50	42%
Badakhshan University	32	17	49	35%
KSU	3	25	28	89%
Total	64	63	127	50%

2. Research projects

2.1 Assessment of the design and delivery of research projects' process

Key points are presented here along the research process flow, starting with project selection and continuing with comments on the research design workshop, mentorship, status and quality of research and dissemination plans.

- **The process for selecting research projects appears objective and rigorous.** Site visits and meetings were held by UCA's leadership with counterparts in partner universities to define thematic scope of the research to be funded. The selection of the actual projects to be funded was undertaken by UCA through a competitive process that involved submission of research proposals using a standardized research proposal format, review and scoring by a panel of five UCA faculty and staff, all male, assessing each component of the proposal (i.e., context and state of the art, rationale and objective, expected impacts, description, project plan; and reference to literature) and the overall value of the proposed research. A total of 11 projects were selected out of 18 submissions. It is worth noting that most submissions came from Bamyan University.
- **Data is scant but there are suggestions that the design and methodology workshop was useful for participants.** Ten of the 11 research leads attended the kick-off research design and methodology workshop held in Bishkek in March 2018. While data is limited⁵⁶, there are indications that this was a useful opportunity to brush up or learn new content. Review of the agenda suggests that important concepts in research design, ethics, methods and data collection of relevance to research were covered. One participant noted that he had already been "exposed in his academic studies to around 70% of the content covered during the workshop" but this was a helpful to reinforce key concepts. He also appreciated being exposed to research methodology in social sciences, even if not directly related to his field of work. He finally suggested that the "R-software session was important but too short" and it would be most useful to organize a separate workshop on using this research language software: "I use free software from India, but it's not that good, being able to use R would help my future research efforts".

⁵⁶ Due to staff transitions at MSRI, it was not possible to obtain a report or evaluations from the research design and methodology workshop, which would have provided a more rounded assessment of the workshop. Similarly, the MSRI staff interviewed for this evaluation had not attended the initial workshop. As such, feedback is limited to views of one external respondent that attended the activity as participant, the other interviewee being the only research lead that had to be excused from the workshop for professional reasons.

- Interviewed participants are satisfied with in-person mentorship at the workshop and remote support thereafter. The impossibility to hold more regular country site visits and in person meetings with researchers may have limited opportunities for proactive mentorship.** The bulk of mentorship was integrated by design in the research design workshop, with one interviewed participant commenting it was useful to present their research proposal and receive feedback from MSRI faculty and peers before finalization. Thereafter, remote support was provided to research leads and their team members in the form of comments and feedback from the MSRI project lead, though this appears responsive to demand and may have been limited to projects whose focus aligned with the expertise of the MSRI project lead. While external interviewees commented positively on the mentorship received, providing examples of interaction with MSRI, it is not possible to arrive at a rounded assessment of overall satisfaction with the mentorship program.⁵⁷ An internal informant critically reflected that a number of factors impacted the provision of mentorship: English language skills of KSU research leads, and limited site visits due to security and budget constraints to Afghan partner universities.
- 10 research projects are still underway, with some at advanced stages of drafting and demonstrating complex research methods. Some integrate gender related impacts and dimensions.** A total of 10 of the 11 research projects are ongoing, with one being discontinued due to participants' personal circumstance and lack of communication. The remaining 10 are at preliminary findings stage, with 6 of these at the drafting stage⁵⁸. Final peer review by MSRI is planned but had not taken place before the writing of this report. Table 22 provides an overview of the status of research projects. A review of the available 6 draft papers suggest that they are of high practical and applied value⁵⁹. When it comes to research methods used, they range from observational studies to experiments with randomization. Overall, the papers led by Dr. Dawlat Shah Poyesh and Dr. Hasan Ali Malistani stand out in terms of rigour and quality. This should be seen in a context where research from Bamyan university appears to be of higher quality. Finally, two of the papers seem to integrate gender perspectives and impacts.⁶⁰ The feedback of internal informants who are more well-versed with research projects seems to align with the evaluation assessment that 5-6 of the papers are of good quality, with 2-3 of excellent quality and possibly publishable in international peer-reviewed journals.

57 The logframe set a 70% satisfaction target for mentorship support and guidance. Without undertaking a more comprehensive survey, it is not possible to assess whether this target has been achieved.

58 MSRI shared a summary of findings for all 10 papers and copies of 6 actual papers. Of these 6 papers, 5 were in the form of final project updates using an MSRI format. These were deemed comprehensive and akin to paper drafts. One paper, the paper by Hasan Ali Malistani, was an actual draft.

59 While comments are provided on whether findings are applicable to practice and on the research methods used, it should be noted that the evaluator, while being well-versed in research methods, is not a sectoral or agricultural expert, with sufficient understanding of existing literature including for target areas to be able to comment on the unique value of research undertaken.

60 These are the papers by Mesbahuddin Ahadi and Mohammad Reza Ibrahim. Specifically, Ahadi considers women malnutrition in presenting the rationale and value of research to improve women livelihoods. Ibrahim goes further and assesses the impact of tourism in the Band-e Amir National Park on women and marginalized groups and finds that women's participation in tourism is limited and, with it, the contribution that tourism makes to women's livelihoods.

Table 22 – Status of MSRI-funded research projects

University/ Project Title	Research Lead	Progress status
Khorog State University		
Investigation of the biodiversity of garden and grain crops of GBAO and development of a mechanism to increase the productivity of mountain gardens and efficiency of land use, including the use of traditional practices	Dr. Akbar Mamadrizokhonov	Draft paper
Investigation of possibility of complex utilization of Pamir high-mountain geothermal resources for food security	Dr. Saidmir Shomansurov	Preliminary findings
Identifying mechanisms for the effective use of tourist - recreational resources of GBAO for the development of tourism	Halim Karamkhudoev	Preliminary findings
Bamyan University		
Study on drought tolerance of different varieties of potato and its post-harvest quality under Bamyan conditions	Dr. Dawlat Shah Poyesh	Draft paper
Selection of tolerant types of different varieties of common bean under drought and alkaline soil condition in Bamyan	S.M Baqer Hussain	Draft paper
Plant Biodiversity in Qabr-e-Zaghak Watershed	Torabaz Poyesh	Preliminary findings
Preliminary Assessment of Physical, Chemical and Hygienic Quality of Water Resources in Bamyan Central District	Dr. Hasan Ali Malistani	Draft paper
Sustainable Mountain Tourism Development in Bamyan, Afghanistan	Prof. Mohammad Reza Ibrahim	Draft paper
Badakhshan University		
Agriculture intensification “Study on effects of fruit tree intercropping with leguminous crops and vegetables to assess the per unit area food production and cost-benefit analysis”	Prof. Mohammad Amin	Preliminary findings
Study & assessment of on-farm cultivation of marketable medicinal plants for income generation purpose (Black currant or Qaraqat and Black cumin or Zeera)	Shabir Ahmad Bidar	Discontinued
Plastic Film Technology: low-cost greenhouse for off-season vegetable production and marketing to address food security and income generation	Mesbahuddin Ahad	Preliminary findings

- **Dissemination plans have been impacted by the Covid-19 crisis and options for online conferences are being explored.** MSRI planned to share preliminary findings from funded research at a conference targeting government officials, NGOs and donor agencies but Covid-19 travel restrictions led to the cancellation of the event. There are ongoing discussions at UCA to hold two online conferences, one for each target country, in August, after this evaluation report was compiled. Reportedly, these plans are at the stage of

management approval, including consideration of in-person conferences subject to lifting of travel restrictions.

2.2 Assessment of research projects' impact

- **MSRI's funding and support enabled applied research, some of excellent quality, that would likely not have been possible without its support.** External informants have expressed appreciation for the financial and technical support received from MSRI and conveyed that their applied research projects would have not been possible without MSRI and the generous financial support provided by IDRC and AKFC.
- **It is hard to determine whether these projects contributed to enhanced research capacity, at either individual and institutional levels, but interviewed researchers are hopeful that research, once published, will help elevate their academic standing and possibly contribute to their career progression.** Given lack of baseline data, it is not possible to assess in a rigorous way whether research capacity gains were realized through this project, and performance of individual research leads may or may not align with their baseline capacity at the start of the project. Informants however noted that they hope publication of MSRI-supported research will help elevate their academic status. For instance, one informant stated: "I hope (the publication of research) will help with the ranking of faculty at my university".
- **Although MRSI and researchers are actively thinking of dissemination opportunities, it is too early to assess research impact on policy and practice and on the wider academic practice.** Interviews with external informants show that research leads are actively thinking of opportunities and approaches to present their research findings to relevant audiences (e.g., government officials, farmers associations etc.). Also, as already mentioned, MSRI is planning to facilitate some country level dissemination via conferences. Feedback from an internal informant suggests MSRI is committed to providing guidance and support in identifying peer-reviewed journals for publication of the best research and is exploring options for a UCA compendium of research papers. In line with feedback from a researcher ("we do not have access to journals. I hope that the paper will be published by MSRI and UCA"), it appears important that MSRI continues to extend support to researchers in identifying and creating opportunities for publication and dissemination.

2.3 Assessment of research projects' sustainability

- **There are indications that the equipment bought for research needs continues to be used for research and teaching at partner universities.** A contract clause on ownership of material bought by research leads stipulates that material belongs to partner universities. Informants report using funding to buy a variety of durable assets (e.g., PH meters, laptops, camera, books, materials for greenhouses etc.) that are being used to support new research and applied teaching. An external informant noted: "the equipment we bought is essential for me, my peers and students to do applied work and apply theoretical learning on the ground". Another external informant shared similar insights and added that given lack of university and government funding, there is "ongoing need for financial support from MSRI to stock up the university research laboratory".
- **There are indications that research findings have been integrated in teaching.** External informants suggested that they have integrated relevant findings and approaches in their

teaching, but it's not possible to assess the extent or sustainability of research use in teaching.

- **UCA is pursuing additional funding opportunities that may provide room for use and exploration of topics covered by the current program.** A mention was made of a European Commission-funded program on climate change in Afghanistan which may provide UCA room for amplifying the reach of some of the existing research and delving into new areas of research that more closely relate to the material covered in the CPNRM.

3. CPRNM

3.1 Assessment of the CPNRM design and delivery

Key points are presented here following the course process, starting from participant recruitment, to continue with course design, pre-course preparations, key aspects of course delivery, and post-course follow up including national workshops. These are preceded and followed by some overarching considerations on the value of the CPNRM.

- **Interviewees similarly valued the comprehensive and multi-disciplinary nature of the program and the conceptual lens it provided to assess agricultural practices in light of a changing natural and climatic environment.** An internal respondent noted that the key added value of the course was to help agricultural and horticultural scientists better appreciate how natural hazards, land degradation, and climate change impact agricultural practices. A course participant noted in turn that they found it useful to be exposed to key concepts in geology that relate to natural hazards, despite this not being core to their expertise. This helped them better appreciate the influence that the natural environment plays on agriculture and ultimately the livelihoods that depends on it. Among suggestions for improvements, course evaluations mention more focus on GIS systems. Interviewees mentioned more attention and time for ecotourism, water and soil conservation, and deforestation.
- **The program was clearly conceptualized and explained to participants through course and module overviews which generally align with best practice in teaching and learning.** A review of curriculum overviews and modules revealed many notable strengths including:
 - Overviews of course content and relevance to learners and their country contexts;
 - Clear definition of anticipated learning outcomes;
 - Clear expectations for participants in terms of the amount of effort and time needed, including in hours and academic credits;
 - Clear articulation of course requirements and evaluation of participants, including key aspects being assessed for each module and their relative weight in the final score;
 - Overviews of course instructors and their qualifications in relation to the topics taught at the course;
 - Relevant readings for each course module.
- **While participants appreciated the quality of pre-course reading, some interviewees found it difficult to download and review materials ahead of the course due to internet bandwidth, which, they feel, impacted their preparation for the program.** One participant noted that slow internet and power outages made it difficult to download materials and they had to cram to review while travelling to Bishkek. Referring to internet bandwidth

issues, another participant noted: “I could not prepare as well as I wanted, including to come up with a more solid research proposal”.

- **The course used a good mix of teaching methods that were widely regarded as effective and kept participants engaged and attentive.** Participants noted that the mix of methods used supported learning and assimilation of new knowledge. Concretely, this included combining traditional lectures with i) opportunities for interaction between participants and with lecturers, ii) group exercises providing opportunities to digest knowledge, deepen analytical thinking and discuss research implications and iii) site visits to observe and discuss challenges and solutions for sustainable agricultural practices. An internal interviewee shared that all participants “were in attendance throughout the course, they were always punctual in the morning and participated actively in discussions”. An external interviewee commented that “the mix of methods used - lectures, practical work, work in teams, field visits – was extremely good”. This said, the course evaluation conducted by MSRI and one interviewee suggest that the course could further shift the balance towards practical work, with theoretical knowledge best assimilated through reading and pre-course preparations.
- **Despite language barriers, peer learning was highly valued.** It was noted by some internal and external interviewees that the mixed English proficiency of participants hindered active participation of some and fluid communication between participants, especially between Tajiks and Afghans. This said, there was unequivocal appreciation by external interviewees of the exchange and networking opportunities between academics that are grappling with interconnected disciplines in the widely similar geographic contexts of mountainous regions of the two countries. One interviewee noted: ““It was great to be able to share experience with other faculty at the course and more generally our experience and approach in teaching”.
- **Interviewed participants commented positively on the calibre and skills of experts teaching the course.** Informants gave accolades to Prof. Sidle, the course convener and Director of MSRI. One participant noted “his extensive expertise, research track record and ability to teach effectively”. Another shared that “despite being in poor health during the course, he was on time for his teaching, passionate and always available to provide guidance to help write their research paper”. Positive comments were also reserved to other faculty but interviews suggest a more uneven appreciation. It was however difficult to get specific feedback on other individual faculty. Also, the course evaluation conducted by MSRI suggests a desire for more senior research staff to be included as lecturers of future programs.
- **Both internal and external respondents conveyed that the CPNRM was very intensive and compressed.** The post-course evaluation conducted by MSRI noted that the “strongest criticism was that the program was too short. The course moved quite rapidly and covered a wide range of material, thus more time could have been allotted”. This was confirmed in interviews, with some divergence over how to address it in future programs: one internal stakeholder suggested that adding one more week may make the course more digestible (i.e., from 3 to 4 weeks). External respondents suggested adding significantly more time with one putting forth that “the course should be doubled in duration if run again” (i.e., from 3 to 6 weeks).
- **Step down workshops conducted by MSRI, partner universities and CPNRM participants in all countries were critical opportunities to reinforce partnerships and share learning with a high number of students and faculty, and particularly women.** MSRI and partner universities organized three national training workshops on NRM where most faculty

members trained at the CPNRM adapted and delivered content from the course and shared it with other faculty and students at home institutions. High level participation of leadership at partner universities and their opening statements point to a strong commitment to the partnership with UCA's MSRI. The workshops were also critical opportunities to share knowledge from the CPNRM with a total of 118 faculty and students (see table 23). Worthy of note is the number of female participants at these national workshops, with women representing on average 38% of attendants. This data is particularly encouraging for Afghanistan where the number of women attending national workshops match or exceed the proportion of women in those universities' student bodies (see table 24). MSRI reported encouraging partner universities and CPNRM participants to invite female students and researchers at these events.

Table 23 – Number and gender of participants at national workshops⁶¹

	Males	Women	Total	% of women
Badakhshan University	29	21	50	42%
Bamyan University	25	10	35	29%
Khorog State University	19	14	33	42%
All National Workshops	73	45	118	38%

Table 24 – Number and gender of students at MSRI partner universities in Afghanistan⁶²

University	Total student no.	% of women
Badakhshan University	5,124	32%
Bamyan University	6,337	29%

- **Documents reviewed point to solid course management, including rigorous grading of participants at the CPNRM and assessment of lecturers delivery at national step down workshops.** MSRI graded participants rigorously for their participation in all the five modules of the CPNRM as well as for their final group project. Participant-led sessions at the national workshops were assessed on the basis of self-assessments and MSRI staff assessments of teaching methodology and command over the subject matters. These assessments are worthy of commendation as is the thoroughness of project documentation and other monitoring efforts spearheaded by MSRI. A missed opportunity is the lack of baseline data on teaching skills, which is further discussed below.
- Overall, **considering this was the first ever certificate program delivered by MSRI, it was largely regarded both internally and externally as a success, with requests for running it again, including at a master's level.** All external respondents noted their appreciation for the program and suggested running it again on a regular basis so their colleagues, especially younger or new faculty, can benefit from it. In line with lessons learned from UCA's IPPA's work in Afghanistan, there seems to be demand for translating the CP into a master's level course. One external interviewee from Afghanistan noted that master's

61 Participant data have been sourced from a national workshop assessment conducted by MSRI.

62 Afghanistan Statistical Yearbook 2017-18, data were sourced from and elaborated by MSRI.

programs are more relevant for academic careers and profiles. They also noted that, “some master’s programs require 35 credits plus research. With the CP being already at 30 credits, it could easily be converted into a master’s level course with the addition of some content and a more ambitious research program”. This generally aligns with MSRI’s plans, which are discussed further below.

3.2 Assessment of CPNRM impact

- Most participants did well in their final grades, pointing to active learning and assimilation of new knowledge, with women performing on par with men. Differences in the maturity of academic establishments, and profile of faculty may explain variations across partner institutions.** Fifteen of the 16 academic participants successfully graduated from the course (with one withdrawing in the middle of the course for personal reasons). Leaving aside differences in individual performance, aggregate data (table 25) suggest that women did as well as men. Also, when looking only at participants from KSU, women outperformed their male counterparts: 76.53 vs 72.26 on average, respectively. Aggregate analysis also show that the performance of Badakhshan University participants was lower than their peers from other universities. Two interviewees suggested that this can be explained by the recent establishment of Badakhshan University, the lower academic profile of faculty at the university, which tend to possess only Bachelor’s degrees and their mixed English language skills. While final grades for this subgroup are lower, it could be speculated that they were also lower at baseline. One participant further commented: “It’s exactly younger institutions like Badakhshan University and their faculty that benefit most from MSRI’s continuing support”.

Table 25 – Grades of CPRNM participants⁶³

Variable	Grade out of 100
Average grade of all graduating students	75.87
Average grade – all women graduating	76.53
Average grade – all men graduating	75.70
Average grade – Badakhshan University graduates	70.39
Average grade – Bamyan University graduates	82.02
Average grade – Khorog State University graduates	74.40

- Participants report having developed new teaching content and acquired greater confidence for their teaching but it’s difficult to gauge the extent of improvements without baseline data.** Thirteen CPNRM participants hosted sessions at national workshops supported by MSRI. The MSRI project lead observed and evaluated their performance (see table 26) with data pointing to good performance overall, and faculty from Bamyan outperforming peers in other institutions. Women did marginally worse according to MSRI

⁶³ This analysis has been undertaken using CPNRM grade sheets as provided by MSRI. It does not include the university participant that withdrew for personal reasons during the course. It also does not include participants from AKF entities.

assessment but there are limitations in the pool of data used.⁶⁴ A fundamental limitation of this analysis is the lack of baseline data, which prevents a more systematic assessment of whether there have been improvements in teaching from before the program.

Table 26 – MSRI assessment of CPNRM teaching performance at the national workshops⁶⁵

Variable	Score (out of 10)
Average score – all participants lecturing	7.18
Average score – women lecturers (only 2 women)	6.50
Average score – male lecturers	7.36
Average score – lecturers at Badakhshan University national workshop	7
Average score – lecturers at Bamyán University national workshop	7.75
Average score – lecturers at Khorog State University national workshop	7

- Reports from interviewees and documentation suggest ownership and consideration of context in adapting materials to use in national workshops.** In their post-national workshops self-assessments, participants noted adapting material to shorten it, make the material more digestible to a less specialized audience, to integrate some insights from their own research, and/or to add content of relevance to their country and region. One internal informant stated that “when the students delivered the national workshops in national language they delivered beyond expectation and integrated data from their research projects to make sessions more relevant to their own countries and universities”. One external interviewee mentioned adapting the material by researching and adding content, statistics and diagrams on climate change that spoke specifically to the context of their country.

3.3 Assessment of CPRNM sustainability

- There are reports of participants sharing materials with their peers and, more importantly, of ongoing integration of content from the CPNRM in their teaching and other academic work.** A survey conducted by MSRI suggests that participants integrated most CPNRM modules in their own teaching (Figure 1), reaching a high number of students.⁶⁶ They also shared materials with peers in their own universities and with

64 A limitation here is that only scores for 2 of out 3 women were available in the final assessment report. The low number of variables included in calculations above suggests caution in interpreting the significance of gender analysis.

65 This analysis is based off data provided by MSRI. Performance evaluations were conducted by one individual only. A total of 14 individuals from partner universities only are included in this analysis. These include 13 CPNRM participants that graduated from the course and went on to teach national workshop and one researcher leading one of the MSRI-supported research projects who was asked to share preliminary findings from his research at the KSU workshop.

66 A total of 16 individuals from partner universities only are included in this analysis. These include all 15 university participants that graduated from the course and one who withdrew but had attended some sessions. Given issues with government regulations in the target countries, partner universities could not formally integrate modules from the CPNRM in their own curricula. As such, efforts by individual participants to integrate content from modules were assessed by MSRI. It is therefore not possible to assess whether the initial log frame target of “25%

colleagues in other universities. Table 27 provides a summary of MSRI analysis of the participants feedback⁶⁷

Figure 1 – Number of CPNRM modules used by participants in teaching⁶⁸

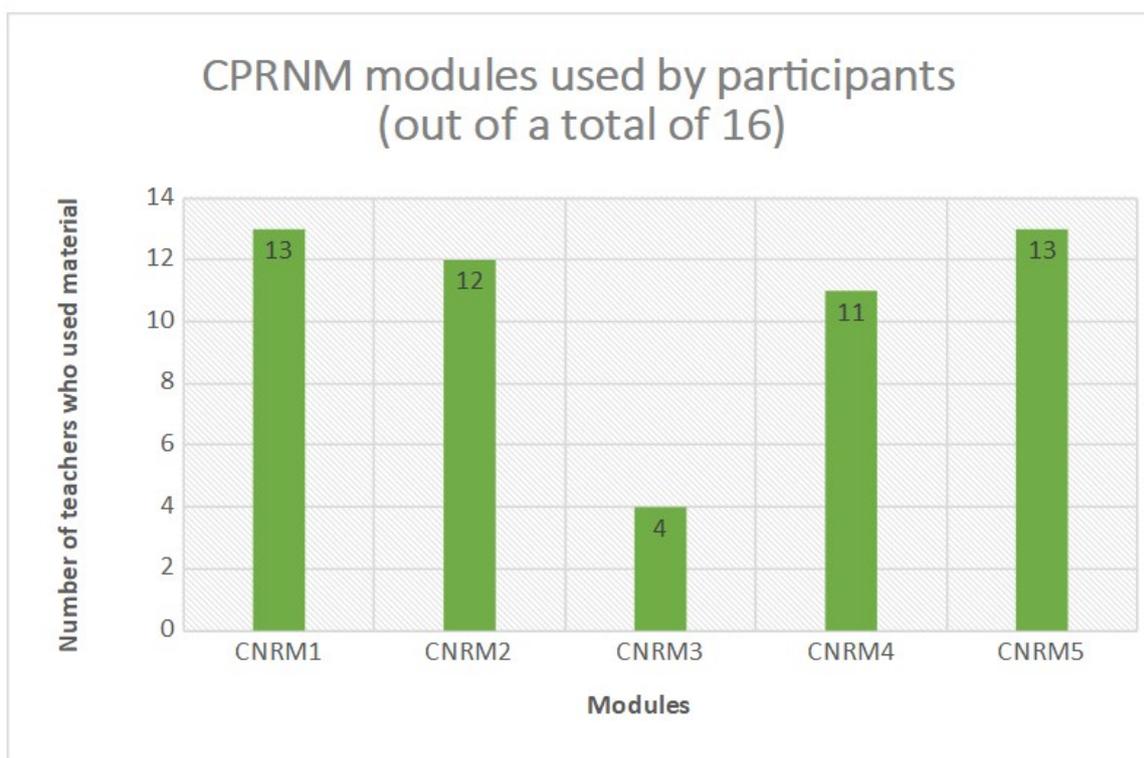


Table 27 – Analysis of MSRI survey data on use and sharing of course materials by CPNRM participants.

Variable	Count	% of total
Number of students enrolled in courses where CPNRM material was used	3126	
Number of participants who shared material with colleagues in own university	16	100%
Number of colleagues from own university with whom material was shared with	271	N/A
Number of participants who shared material with colleagues from other universities	6	37.5%

of developed modules integrated into existing curricular at the project partner universities”. This said, self-reporting indicates this target was exceeded at the individual level. The next footnote provides important methodological caveats on this analysis.

67 Since this survey is based on participant self-assessment, data could not be objectively verified and there appears to be significant outliers that skew data. For instance, one participant stated teaching materials in courses where 1123 students were enrolled, over one third of the total of 3126. Also, most of the sharing with other universities was done by one participant, who shared with 36 colleagues out of a total of 52. These numbers suggest caution should be applied in interpreting these data at face value.

68 CNRM1 is the first module of the program, “Concepts of sustainability and sustainable land management”; CNRM2 is the module on “Integrated agricultural management and food systems”; CNRM3 is “Livelihoods in rural mountain communities”; CNRM4 is “Natural hazards and disaster risk reduction”; Finally, CNRM5 is the module on “Climate change”.

During interviews, participants provided examples of CPNRM content integration in their own teaching and research. One interviewee mentioned integrating material in ecology curricula they are teaching this current year of study. Another mentioned adding content on climate change in courses on horticulture. A third mentioned using content in a research proposal for water and soil conservation. There are also examples of uses in other academic activities. For instance, an interviewee reported using some CPNRM material on sustainability and climate change in a conference on climate change impact on women sponsored by a third party. Another reported using material to inform the work of students involved in advocating for environmental conservation. While it is not possible to gauge exactly the extent of content integration across participants, these examples do point to sustainable gains.

- **UCA's MSRI has built important in-house capacity to deliver this course in the future and is thinking about options to run a modified course at master's level.** An internal respondent noted that the decision to run this course leveraging internal expertise helped MSRI add to its ability to offer a credible program in a new field of study. MSRI shared that it is considering a graduate program on mountain environmental issues, but funding options for this are yet to be identified.

4. Cross-cutting considerations on the sustainability of the CPNRM and MSRI-supported research projects

- **This program helped develop new, or strengthen existing, partnerships between universities and academics:** An external interviewee noted that the CPNRM helped them develop links with faculty at UCA's MSRI and with the Aga Khan Development Network in their country, which may lead to future collaborations. Internal respondents noted that the program helped developed important new contacts with Afghanistan universities that could lead to new partnerships around teaching and research on these topics, while also providing a platform to strengthen the more established partnership with KSU. In this respect, it was noted that both the CPNRM and research projects provided MSRI with a unique vantage point to observe and identify accomplished academics or rising stars that could be associated to MSRI's research and teaching work in the future, including through joint appointments. A case in point is the recent recruitment of a CPNRM participant from KSU as a postdoctoral researcher at MSRI.
- **UCA's institutional and long term commitment to partner universities in Tajikistan and Kyrgyzstan is matched by their desire to continue this partnership, which bodes well for amplifying results from the P2I program in the future.** In line with its mission, MSRI is committed to ongoing work with partner universities in mountainous regions of Afghanistan and Tajikistan. This commitment is in turn aligned with a desire for ongoing and deeper collaboration at partner universities. For instance, an external informant noted: "We are thankful to MSRI and UCA for this program and cooperation, we trust this cooperation will continue in the future. Ours is a new university, and needs more capacity building and research support, especially to support our young faculty".

5. Recommendations

- Cross-cutting:
 - Consider options and identify funding to run this program again. There is continuing demand for this program in the region and suggestions that more faculty and students at partner universities would benefit from it.
- On research projects:
 - Match mentorship to needs and not demand. If run again, preserve the overall set up of the mentorship program, but allocate sufficient resources for a mentorship program that is responsive to the varied needs of all researchers. This may involve matching researchers with several faculty at MSRI (or the whole UCA) who can assist researchers on relevant areas of expertise and in their own language in a proactive way, including through regular in person meetings. Sharing the mentorship load across UCA staff may help make mentorship more manageable. This will need adequate budgeting.
 - Provide guidance on dissemination of good quality research: in addition to completing peer review, researchers need guidance and support in identifying reputable journals for the publication of outstanding research. They will also benefit from MSRI advice on strategies and opportunities to present and share research to policy makers and practitioners. In this vein, it may be important to rely on the voice and advocacy power that is afforded by the partnership with the AKDN in both countries.
 - Continue to assess research impact by collecting citations of published research and actual integration of findings in policy or practice by the government of other stakeholders.
 - Consider options to continue working with the most promising researchers supported by the program, by funding new research or associating them to the work, research and status of UCA. This should proceed in parallel to efforts to develop the capacity of promising younger faculty at partner universities, for instance by linking research support to the CPNRM or a future master's program (more on this below). This could also provide openings to involve a larger number of emerging female researchers in future programs.
- On the CPNRM:
 - In addition to pursuing donor funding for future programs, explore options for running the program for a fee, opening it up to qualified and deserving government officials, professional associations and civil society organizations, and in the process raising funds to cover the costs of participants from partner universities, who will not be able to pay for this course. This may also help support efforts to bring more women into future programs in light of structural gender imbalance at partner universities in Afghanistan.
 - A number of suggestions emerge on how future programs could be further improved by:
 - Maintaining a multi-country / mountainous regional focus but considering how to address the needs of weaker partners and faculty with tailored responses, such as refresher courses before the program or targeted one-on-one tutoring, including in the language of the participant.

- Making pre-course readings available in print through partners or satellite centres in each respective country (e.g., MSRI campus in Khorog, AKF in Afghanistan) to ensure that participants with low internet bandwidth can review all the material ahead of the course.
 - Adjusting faculty composition in light of participant feedback, while retaining a unified course convener to ensure course coherence.
 - Updating content to reflect the latest thinking and research as well as expectations of participants and the actual teaching at partner universities
 - Better linking research projects to CPNRM. As mentioned above, this could be part of the development of a master's program with the master's thesis providing room for more ambitious and extensive individual research.
- If running again with the ambition of bolstering teaching capacity, organize the CPNRM in conjunction with a training on effective teaching methods (e.g., covering adult learning methods, learning styles etc.) to better equip participants with the skills to teach complex content in an effective way for learners. MSRI could also leverage the GRLE methodology developed by SPCE to train trainers on gender responsive learning. Further, baselines for teaching skills and GRLE should be undertaken to more objectively gauge improvements against baselines using objective and measurable criteria.

Cross-cutting considerations and recommendations

- **UCA has overall delivered on its many commitments under the program, as outlined in the report. Key factors in the success of the program include the program's alignment with UCA's mission, workload sharing between different schools and a professional and committed leadership and staff base.** An important factor in the success of the program was the alignment between the program's objectives and UCA's overall developmental mission. This alignment in turn created virtuous incentives for delivery, as UCA, via this program, was ultimately delivering on key aspects its core mission. This ultimately also bodes well for the sustainability of the interventions and new offerings created under this program. Delivery was also supported by the clear division of labour between different UCA's schools/institutes, with each playing to its strengths. Issues in delivery were noted where too many responsibilities were vested in the same overburdened individuals. This in turn suggests that improvements in assigning realistic workloads across entities and staff are possible in future programs. Finally, in conducting data collection for this report, several staff were interviewed and helpfully answered queries related to the program, offering thoughtful insights and rich documentation. These interactions in turn revealed that UCA possesses an exceptionally professional and driven leadership and staff base, who are passionate about their work and worked hard to deliver on their commitments under this program.
- **This said, there is room for improving cross learning between UCA's schools/institutes.** While the program was governed by a unified vision and rested on university-wide systems and processes (e.g., in terms of budgeting and reporting, recruitment of staff etc.), each participating school/institute also established its own approaches, developing blueprints that should be shared between UCA entities and could in the future inform university-wide approaches. For instance, SPCE has developed solid systems for participant and impact data collection, management and analysis. These facilitated monitoring and evaluation efforts during implementation and increased SPCE's overall evaluation readiness for this final evaluation. Similarly, MSRI's management of its research papers (i.e., with the requirement to complete research proposals, an objective group assessment and selection of research proposals, and requests for researchers to submit periodic progress reports to check on progress) aligns with international standards in research management and accountability. These could have served as examples for other entities that were involved in research under this program and may have facilitated a tighter management and delivery of their research responsibilities. In light of the increasing geographic dispersion of UCA entities and staff across its target countries and across locations within these countries, it is important to establish mechanisms for sharing and learning within UCA in future programs. This will also help facilitate group thinking around synergies between different program and schools, so that this does not exclusively rest on UCA's leadership.
- **UCA is ideally positioned to build on its strong approach to project management and delivery to further strengthen the design of programs, track impacts over the medium term, and communicate these impacts more effectively to external audiences.** Log-frames are important tools for internal and external accountability and UCA's efforts under the P2I program show that the university has overall met its obligations. But log-frames also come with limitations in terms

of the changes that they can realistically track and should not be constraining of the natural need to adapt and re-focus programming as thinking changes in light of lessons or new information. There is a need to continually ask the strategic questions of what are the changes that UCA ultimately wants to see and how to best achieve them, revising log-frame indicators where relevant in collaboration and dialogue with donors. UCA is ideally positioned to push the envelop through a number of tweaks to the way it conceives, monitors and communicates the impact of its programming, such as:

- **Develop more precise and explicit change objectives and strategies.** When developing research, the use and audiences of a specific piece of research must be clear as much as possible from the get-go. This clarity will then help shape decisions on how to best deliver relevant messages from research to its intended audiences. In this respect, the pay-off from organizing a small-group presentation to relevant technical staff at a government department may be far greater than organizing several events that do not do as well at reaching the ultimate audiences of the research paper.
 - **Develop institutional approaches to tracking of impacts over the medium term, going beyond program-specific monitoring and evaluation (M&E).** UCA is in the business of long-term change, in a generally difficult region, where change has been elusive. The research and educational programs it delivers, including under the P2I, require long time lags and complex, unpredictable change chains to materialize results that extend beyond what can be realistically tracked within the life-cycle of a three-year program. This in turn raises questions on the need to go beyond what can be captured in the short term (e.g., assessing immediate learning gains from a capacity building program) to what can only be captured in the medium to long term (e.g., assessing if and how UCA's individual and institutional targets have gone on to apply learning in their professional roles or mandates and resulting changes). This in turn raises questions on how UCA can move away from a sole focus on program-specific M&E, which is inevitably short-term in nature, to developing an institution-wide approach to M&E that will allow it to maintain focus on tracking impacts from past programs, even when these have run their course.
 - **Improve UCA's external facing communications and story telling.** UCA is punching below its weight when it comes to communicating its work externally in an effective manner. Time and again in the course of this evaluation, staff shared interesting stories and anecdotes on program's impact but details were insufficient for well-crafted impact case studies and there was little effort to document these stories in a systematic way and to communicate them effectively externally. Even where attempts were made at using video to capture stories, these stayed at the level of unedited testimonials. Ultimately, this may require some professional training for project management staff to better gather data and tell stories of impact with a human face and/or recourse to professional story tellers in the future.
 - Focusing on the above will contribute to further elevate the calibre of UCA's programming, and give it important tools to raise its external visibility and support its fundraising efforts.
- **Through P2I, UCA has tried to envision a new paradigm for the region's development. While there are questions on how realistic UCA's focus on innovation is in light of the region's developmental realities, UCA's dual focus on academic practice and professional development seems central to unlocking the region's potential.** Ultimately, it is difficult to assess whether UCA's efforts to build human and organizational capacity for innovation in Central Asia and Afghanistan will succeed. Some informants were overall skeptical that technology or innovation can be realistic propositions in the predominantly agricultural societies of Central Asia, that

remain highly dependent on remittances and/or aid, and in the case of Afghanistan, suffer from extensive security challenges, which in turn debilitate the most basic functioning of institutions. But through this program, UCA has tried to envision a new paradigm for the region's institutional development, which may contribute to shifts in policy thinking in the long term, if the political context enables them. What seems clear is that supporting change will require a continuing dual focus on improving the quality of higher education and academic practice and its links to policymakers, which has been the purview of IPPA and MSRI in this program, with ongoing attention to improving the quality of primary, secondary and vocational education in the region, SPCE's core focus, to support current and future generations in their pursuit of educational and employment opportunities that can bring immediate tangible improvements to their living conditions.

Recommendations

- Regularly assess and revise work commitments of key staff, identifying additional support where needed, in order to ensure timely delivery of program interventions.
- Ensure future programs include opportunities for sharing and learning between UCA schools/institutes and their staff.
- Develop more precise change strategies for program interventions, particularly around research, to make sure that new knowledge produced gets to, and informs the work of target audiences. It is desirable in this respect to establish UCA-wide protocols for research design, which could include gender responsiveness, research review mechanisms and communications planning for research outputs.
- Revise and adapt log-frame indicators and theories of change on an ongoing basis, in open discussion with donors, when new information or learning suggests shifts may be needed to achieve program objectives.
- Develop an institutional approach to monitoring, evaluation and learning, to ensure ongoing assessment and analysis of results that take time to materialize, and to generate learning that can inform and improve programming at UCA, as well as the work of other organizations that are active in the same areas and fields of work. This in turn requires more proactive efforts at sharing learning generated through programs with other development practitioners.
- Improve external communications through a stronger focus on sharing results from past and future program (e.g. impact case studies), with better use of story-telling techniques.
- Improve evaluation readiness by ensuring that data monitoring data are collected on a rolling basis using standardised protocols and systems across UCA entities. Further, set aside sufficient time and resources for final evaluations and discuss with donors that final evaluations of future programs should ideally take place only once programs have been fully implemented and all data for final evaluations has been collected.

Annex 1 – Evaluation TOR

Consultancy to Conduct P2I Impact Evaluation

Department: Development and Donors relations

Reports to: ORD

Duty station: Bishkek, Kyrgyzstan

Deadline: May 29th, 2020

Summary of Position and Key Responsibilities

In response to this need, Aga Khan Foundation Canada (AKFC) and the International Development and Research Centre (IDRC) have jointly funded a C\$2.2 million project (\$1.5 million IDRC, \$500,000 AKFC, and other sources) for Pathways to Innovation: Strengthening Mathematics, Science and Economic Policy Capacity in Afghanistan and Central Asia (P2i). The three-year project, running from 1 March 2017 to 31 August 2020, is implemented by the University of Central Asia (UCA) includes research and related interventions focused on innovation and hands-on training in strengthening mathematics, science and economic policy capacity in Afghanistan, Kyrgyzstan and Tajikistan.

The University of Central Asia is seeking a Consultant conduct an impact evaluation of P2I. The evaluation is necessary to understand the impact of project activities and identify possible improvements to program design. The evaluation will assess the effectiveness, relevance, sustainability, and intended and unintended outcomes of three of the project's components:

- The Executive Masters in Economic Policy (EMEP);
- The Certificate Programme in Economic Policy (CPEP); and
- Certificate Programme in Natural Resource Management (CPNRM)

UCA will begin by developing an Institutional Narrative and Self-Assessment that would provide the context, describe activities undertaken, present all relevant data (include students' current employment status), summarize results of student course evaluations, and discuss challenges. The Narrative would be completed by early June 2020. This would provide a documentary base for the external evaluation.

Main Duties and Responsibilities

The consultant will be required to design and implement an external evaluation consisting of the evaluator's review of the Narrative and responses to requests for clarifications and additional information that may arise. The key component would be interviews with a sample of students of the EMEP and CPEP programmes and faculty who completed the CPNRM course. UCA would provide a draft questionnaire. The interviews would be conducted online. In addition, key senior staff of the Ministry of Finance would be interviewed regarding EMEP graduates' performance in the workplace and their role in filling some of the human resources capacity gaps. An orientation, existing project documents, progress reports, and important contacts will be provided to the consultant to facilitate the completion of the assignment.

Required Qualifications and Experience

- Experience in monitoring and evaluation in the international development context;
- Knowledge and experience with capacity building and public policy initiatives;
- Familiarity with assessments, surveys, interviews, and writing reports;
- Proven experience working with multi-stakeholder projects;
- Experience working in Central Asia, Kyrgyz Republic, Tajikistan, and/or Afghanistan;
- Familiarity with the Aga Khan Development Network or the University of Central Asia is considered an asset.

Languages:

- Fluency in spoken and written English
- Knowledge of Russian and other languages of Central Asia will be an asset.

How to Apply

Please submit an up-to-date resume including at least three references to the mail:

hr.recruitment@ucentralasia.org

Only shortlisted candidates will be contacted.

Review other job vacancies at: <http://www.ucentralasia.org/About/CurrentVacancies>

Annex 2 – Documentation reviewed by the evaluator

1. Cross cutting

- Full funding proposal with budget and log-frame
- Project summary
- Annual workplans
- Concept note of previous IDRC funded program
- Annual reports submitted to the donor
- Semi-annual internal reports

2. On Objective 1 (IPPA component)

- IPPA papers
 - Summary list of IPPA papers with leads and publication status
 - Published IPPA research papers
 - List of dissemination events organized
 - List of participants of dissemination events
 - Download statistics for IPPA papers
 - Announcement of online webinar
- EMEP
 - IPPA self-assessment of EMEP delivery
 - EMEP at UCA summary
 - EMEP participants' video or written testimonials
 - MOU between UCA and Ministry of Finance of Afghanistan
 - Syllabus for the EMEP course
 - Detailed overview of “Methods of Policy Analysis” modules
 - Data on participants including gender, and grades for each modules and overall for both EMEP cohorts
 - Summary and data of participants evaluations of both EMEP courses
- CPEP
 - IPPA self-assessment of CPEP delivery
 - CPEP syllabi
 - Data on participants including gender, and grades for each modules and overall for completed CPEP courses in Kyrgyzstan and Tajikistan
 - Summary and detailed data of participants evaluations of completed CPEP courses

3. On Objective 2 (SPCE component)

- SPCE self-assessment of its delivery
 - Comprehensive participant database with gender, course attended grades and other variables for both the GRLE and MM component of the program, inclusive of SPCE own analysis of the data
 - Material on the program's Facebook page
- On Mental Maths
 - background research on Mental Maths underpinning the program
 - Mental Maths curriculum
 - Mental Maths syllabus
 - Interim external knowledge evaluation ("Summary knowledge assessment report - Students of the «Mental Mathematics» course") with baseline and end line data
 - online modules
- On GRLE
 - Background research on gender pedagogy underpinning the program
 - Gender responsive training manual and annexes

4. On Objective 3 (MSRI component)

- MSRI self-assessment of its delivery
- MSRI component summary
- MSRI research
 - research proposals
 - UCA assessment and ranking on research proposals
 - Signed agreements with research leads
 - available research papers
 - final progress reports from researchers
 - intermediate progress reports from researchers
 - Agenda of research design and methods workshop
 - List of participants of research design and methods workshop
- CPNRM
 - participant application form
 - course description
 - course modules
 - participant grades and analysis
 - Group capstone projects
 - post CPNRM participant survey responses and analysis
 - Post CPNRM Training Workshop assessment.

Annex 3 – List of Interviewees

#	Name	Role	Role in the P2I Program	Relevant Program Objective/component
1	Bohdan Krawchenko	Dean of Graduate School of Development, UCA	Overall strategy/program design and adaptation and oversight of implementation	All components
2	Sameer Dossa	Donor Relations Officer, UCA	Responsible for compliance and donor reporting	All components
3	Zalina Enikeeva	Academic Programmes Coordinator / Research Fellow	P2I project manager for IPPA, responsible for reporting, budgeting, administration and implementation of IPPA components	Objective 1 – IPPA
4	Roman Mogilevskii	Associate Director and Senior Research Fellow	Developer of EMEP and CPEP curriculum; EMEP instructor and curriculum developer; author of three IPPA papers	Objective 1 – IPPA
5	Kanat Tilekeyev	Senior Research Fellow	Developer of EMEP and CPEP curriculum; EMEP instructor and curriculum developer; author of 2 IPPA papers	Objective 1 – IPPA
6	Aida Bolotbekova	Former UCA staff	Previous P2I project manager for IPPA, responsible for reporting, budgeting, administration and implementation of IPPA components	Objective 1 – IPPA
7	Naser Sidiqee	Director General, Coordination, Monitoring & Reporting, Deputy Ministry of Policy, Ministry of Finance of Afghanistan	UCA counterpart at Ministry of Finance, for EMEP program	Objective 1 – IPPA
8	Louise Grogan	Professor of Economics, Department of Economics and Finance, University of Guelph	Peer reviewer of select IPPA papers and of the EMEP syllabus	Objective 1 – IPPA
9	Nurila Ibraeva	Kyrgyzstan National Agrarian University. K.I. Scriabin	CPEP participants from Kyrgyzstan	Objective 1 – IPPA

10	Dilovar Butabekov	Director of SPCE for UCA	Provides strategic oversight to SPCE, including objective 2 of the P2I program	Objective 2 – SPCE
11	Rahman Nazar Farhad	Head of SPCE Afghanistan	Project manager for SPCE Component, responsible for reporting, budgeting and implementation of SPCE components	Objective 2 – SPCE
12	Sohrab Nazari	Gender trainer	Delivered gender pedagogy trainings	Objective 2 – SPCE
13	Mawjigul Sultani	Mental Maths instructor	Delivered Mental Maths teaching	Objective 2 – SPCE
14	Dr. Roy Sidle	Director of MSRI	Lead CPNRM instructor and curriculum developer/course convener. General oversight of all MSRI components, including CPNRM and MSRI-supported research projects	Objective 3 – MSRI
15	Aziz Ali Khan	MSRI Research Fellow	Project manager for MSRI Components, responsible for reporting, budgeting and implementation of MSRI components. Works closely with researchers Bamyan University, Badakhshan University and Khorog State University to mentor them and track updates on projects	Objective 3 – MSRI
16	Zubaida Shomamadova	Lecturer Khorog State University, Tajikistan	Beneficiary of CPRNM	Objective 3 – MSRI
17	Dr. Dawlat Shah Poyesh	Assistant Prof. Bamyan University, Afghanistan	Beneficiary of CPRNM and Research Project Support	Objective 3 – MSRI
18	Ahmad Shabir Hozad	Lecturer and Dean of Faculty of Agriculture Badakhshan University, Afghanistan	Beneficiary of CPRNM and Research Project Support	Objective 3 – MSRI