

京都大学	博士（工学）	氏名	Marina Hamidzada			
論文題目	Decomposing and restructuring women's disaster vulnerability through their voices: Case studies from rural and urban Afghanistan (現地の声に基づいた女性の災害脆弱性の概念の分解と再構築：アフガニスタンの地方部と都市部のケーススタディ)					
(論文内容の要旨)						
<p>The main aim of this dissertation is to understand women's disaster vulnerability in Afghanistan, examine the results within the theoretical frameworks of gender, and propose recommendations for disaster prevention policy in the country. In particular, the study identifies the factors which contribute to women's vulnerability pre-disaster and post-disaster. Focus groups were carried out in both rural and urban communities before and after the conduction of a disaster education program by a non-profit organization. The study applies Grounded Theory (GT) and Interpretive Structural Modeling (ISM) in order to identify, understand and map the inter-relationship between vulnerability factors identified, as well as to analyze the overall effect of the disaster education program in both communities. The dissertation contains seven chapters described in more detail below. Chapter 1-3 present the introduction, literature review and methodolgy of the study, respectively. Chapters 4-6 discuss the main results of the study, and Chapter 7 presents the conclusions and recommendations.</p>						
<p>Chapter 1 introduces the study problem and background, and presents the research aims and objectives. Many studies show that disasters do not affect people equally. In particular, the number of female victims in disasters around the world higher than for men. This is the case of Afghanistan, a developing country, with relatively low capacity to cope with natural disasters. Due to long term civil war there are scant reports and no academic studies that investigate the vulnerability of Afghan women in disasters. Thus, the main aim of this study is to understand women's disaster vulnerability in Afghanistan and to propose recommendations for an engendered disaster management policy in the country.</p>						
<p>Chapter 2 introduces the concept of vulnerability and a detailed review of the literature on gender studies and gender issues in disasters from around the world. Furthermore, it discusses research approaches used in gender studies, and in particular discusses the applicability of Focus Groups (FGs) for data collection, and Grounded Theory (GT) and Interpretive Structural Modeling (ISM) for data analysis. The use of these two last methods combined is an original contribution of this study.</p>						
<p>Chapter 3 describes the methodology of the study, which included a review of the literature and field data collection in rural and urban areas of Afghanistan through the use of segregated focus groups with Afghan women, men, and disaster management authorities in two different time periods (in January and November 2017). The second field visit was done after the conduction of a disaster education training program by a non-profit organization at the same communities. The use of GT for coding and categorizing vulnerability factors, and the use of ISM for the stratification of factors identified is explained.</p>						

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Chapter 4 presents the vulnerability factors of rural Afghan women pre- and post-disaster. The study found that disaster education and cultural issues are main factors of vulnerability. The application of ISM helped to stratify and clarify inter-factor effects, and confirmed the importance of cultural issues for rural women. For example, due to the lack of female teachers (and budget for this), women and young girls are marginalized from education, and need to travel outside the community to find health clinics with female doctors. The lack of protective measures and infrastructure were found to be key contributing factors increasing exposure and risk pre-disaster. The lack of road infrastructure, evacuation shelters, access to drinking water and health facilities greatly increased women's vulnerability post-disaster.		
Chapter 5 discusses the vulnerability factors of urban Afghan women pre- and post-disaster. Disaster education and cultural issues are the main factors of vulnerability. The findings were similar to those for rural women, however, cultural issues play a somewhat lesser role. Urban women and men are more dependent on government authorities, and less cooperative with them as compared to the rural group. The application of ISM helped identify new interfactor effects, and the stratification confirmed the lower importance of cultural issues for urban women, and also showed that there was less concern regarding protection measures and infrastructure, although the urban women recognized the need to maintain clean ditches and canals to avoid urban flooding.		
Chapter 6 presents the findings of the second field trip after the application of a disaster education program. The program helped to increase awareness, knowledge and disaster preparedness of rural and urban women and men, at least in the short term, with a higher impact on rural women. The rural community took initiatives to secure drinking water by digging a well, and build an evacuation shelter and one-room health clinic. Overall, the factors of vulnerability identified in this study are in agreement with past studies, among them the need for disaster education. However, past studies have not addressed the specific need for segregated arrangements for women and men and the implications this has both logically and financialy.		
Chapter 7 concludes and summarizes the results obtained in this paper, and formlates recommendations for an engendered disaster prevention policy in Afghanistan.		

(論文審査の結果の要旨)

本論文では、アフガニスタンにおける女性の災害脆弱性を、ジェンダー論の枠組みにおいて分析し、結果に基づいて防災政策への提言を行っている。そこでは、1)アフガニスタンの農村部と都市部の女性（および男性）の災害脆弱性は、インフラの有無にどの程度依存しているのか、2)さまざまなステークホルダーが、女性とその家族を災害から守るためにインフラストラクチャ（土木構造物的なものと、コミュニティの伝統的なもの）の重要性を理解し、必要性を認識しているのかという土木工学（土木計画）の問い合わせを立て、究明に取り組んでいる。フォーカスグループ・ディスカッションを実施して収集した口述データに対して、グラウンデッド・セオリー・アプローチ（GTA）とISM法を組み合わせた方法を適用することによって、女性の災害脆弱性の形成要因と構造を明らかにしている。具体的には以下の結果を得ている。

- (1) 農村地域では、防災教育や文化的問題、保護対策が欠如している。例えば女性は教育から取り残されており、女性医師と一緒に診療所を探すために地域外へ出向く必要があるが、道路、避難所、飲料水、医療施設がない。かつそれらは地域の文化的問題と継続的な紛争によって悪化している。一方、識字率が低いにもかかわらず、ほとんどの男性と女性は、洪水制御インフラなどの対策の重要性を認識している。
- (2) 都市部では、防災教育と保護対策の欠如に加えて、財政的、経済的、文化的問題が脆弱性への寄与要因であることが特徴である。また、政府当局への依存度が高く、農村部のグループと比べて住民同士は協力的ではない。
- (3) 農村部と都市部の両方でNPO組織が実施した教育プログラムにより、防災に関する知識と意識が高まった。都市部の参加者は地方自治体が行動を起こすことを強く求めたが、農村部の参加者は住民自身が行動する必要性を認識した。

本論文では災害脆弱性の問題を、コミュニティが災害を管理、許容、回復する能力を含む、より広い視野で捉えており、ISM法の適用は、新しい因子間の関係を分析する上で役立っている。また、内戦にも起因して、アフガニスタンでは災害脆弱性に関する学術的研究はほとんどなく、本論文は同国における「災害とジェンダー」に関する最初の学術研究としての価値をもっている。また、教育や文化的問題などの社会科学的要素と、インフラの機能を関連付けて、災害リスク軽減政策への提言につなげている。成果は工学的に意義があり、学術上、実際上寄与するところが少なくない。よって、本論文は博士（工学）の学位論文として価値あるものと認める。また、平成31年2月22日、論文内容とそれに関連した事項について試問を行って、申請者が博士後期課程学位取得基準を満たしていることを確認し、合格と認めた。

なお、本論文は、京都大学学位規程第14条第2項に該当するものと判断し、公表に際しては、当該論文の全文に代えてその内容を要約したものとすることを認める。

