



GrOW Theme 2 Full Application Form

Created: 05/01/2015

Last updated: 05/29/2015

Page 1

SECTION A - Project Summary

Project title

Name the project using non-technical terms. (Max 150 words).

Growth, Structural Change, and Female Employment: Linkages and Policy Issues

Project duration in months

Duration must include time necessary for all activities paid with grant funding to take place. Duration must also take into account the end of the GrOW program is June 2018. Research and outputs must be completed in advance of this date.

24

List of countries covered in the research

If more than one, please select Ctrl to select all applicable options.

Responses Selected:

| |
|--------------|
| Bangladesh |
| Bolivia |
| Brazil |
| Egypt |
| India |
| Indonesia |
| Jordan |
| Malawi |
| Mozambique |
| Namibia |
| Rwanda |
| South Africa |
| Uganda |
| Vietnam |

Applicant Info

Proposing institution

The proposing institution normally receives and administers the funds. If this institution has not received IDRC funds before, the Institutional Profile Questionnaire must be completed. If the funds are to be administered by a third party, please contact IDRC at grow@idrc.ca to discuss the arrangements.

| | |
|------------|--|
| Name: | Georg-August-Universität Göttingen |
| Address: | Platz der Göttinger Sieben 3 |
| City: | Göttingen |
| Country: | Germany |
| Telephone: | +49 (0)551 39 7190 |
| Email: | dekanat@wiwi.uni-goettingen.de |
| Website: | www.wiwi.uni-goettingen.de |

Lead researcher

| | |
|--------------|--|
| Name: | Stephan Klasen |
| Institution: | Georg-August-Universität Göttingen |
| Position: | Professor for Development Economics |
| Address: | Platz der Göttinger Sieben 3 |
| City: | Göttingen |
| Country: | Germany |
| Telephone: | +49 (0)551 39 7303 |
| Email: | sklasen@uni-goettingen.de |

Participating

Participating institution(s)

Participating institutions are those that will participate directly in the conduct of the research, but will not receive funds directly from IDRC. In this case, the proposing institution is responsible for disbursement of funds and for ensuring that all institutions abide by the standard terms and conditions that apply to the IDRC grant.

How many institutions will be participating?

If there are no participating institutions, please select 1 from the drop down menu and write N/A under the name tab under Institution 1.

4

Institution 1

| | |
|------------|--|
| Name: | Delhi School of Economics |
| Address: | University Enclave |
| City: | Delhi |
| Country: | India |
| Telephone: | +91 11 27666395 |
| Email: | dept@econdse.org |
| Website: | www.econdse.org |

Institution 2

| | |
|------------|--|
| Name: | Stellenbosch University |
| Address: | Privaatsak/Private Bag X1, Matieland 7602 |
| City: | Stellenbosch |
| Country: | South Africa |
| Telephone: | +27 (0)21 808 4624 |
| Email: | ttheron@sun.ac.za |
| Website: | www.sun.ac.za |

Institution 3

| | |
|------------|---|
| Name: | University of Cape Town |
| Address: | Private Bag Rondebosch 7701 |
| City: | Cape Town |
| Country: | South Africa |
| Telephone: | +27 (0)21 650 5696 |
| Email: | brenda.adams@uct.ac.za |
| Website: | http://www.saldru.uct.ac.za |

Institution 4

| | |
|------------|--|
| Name: | Wageningen University |
| Address: | Hollandseweg 1 |
| City: | Wageningen |
| Country: | Netherlands |
| Telephone: | +31 (0)317 482266 |
| Email: | oscar.vanRootselaar@wur.nl |
| Website: | www.wageningenuniversity.nl |

Research Descp

SECTION B - PROJECT DETAILS

Project Summary

Provide a brief description of the project that introduces the main research question, conveys the relevance of the research and main expected results. Summarize how you will aim to enhance research uptake by policymakers and practitioners & build capacities for research as part of your intended outcomes. Highlight why your research team is well suited to carry on this project. Note that you will be asked to address these questions at length through the application. This should be a short overview of your project for the review panel.

Max 550 words

While many women in low-income countries are still self-employed in agriculture, their long-term economic empowerment will depend on their ability to participate in the labor market and work in well-paying non-agricultural jobs. Economic growth and structural change can help remove barriers, but in many contexts have done little to promote female employment. This research program, including 7 projects, will focus on understanding heterogeneity in the impact of growth and structural change on women's employment opportunities and the type of jobs they are able to get.

Specifically, in a conceptual project, we will study the different possible transmission channels from growth to women's economic empowerment and derive hypotheses for the subsequent empirical projects. These include an analysis of the impact of growth and structural change on women's labor force participation in different contexts, on spatial patterns of employment by gender, and on occupational and sectoral segregation. Furthermore we will study how different policies and constraints affect the transmission from growth to female economic empowerment, focusing on the role of trade policies and global value chains, different educational policies, and the linkage between employment and domestic violence. Our research will be primarily based on conceptual and quantitative research, but our inter-disciplinary team will integrate broader research perspectives into the research program.

Our research program will provide answers to the question why the link between growth and female economic empowerment has been so heterogeneous across different countries, settings, and aspects of empowerment (e.g. employment vs. segregation vs. pay). It will identify the key constraints that prevent growth and structural change to promote women's empowerment, and develop a detailed policy agenda for policy-makers in low-income countries to harness growth for greater female economic empowerment. Country-specific policy approaches will be generated for the case study countries included in the research, but broader policy messages will be generated for low-income countries more generally.

We will promote research uptake through a wide variety of research outputs, including discussion papers, videos, policy briefs, country-level policy meetings, larger conferences, and a specially designed short course for policy-makers, members of civil society and academics (to be given in at least 6 low-income countries) that will present an overview of research in this area, highlight our results, and provide tools for policy development in this area. This course as well as the integration of young researchers from developing countries, with a focus on low-income countries, in the research activities will also provide central elements of our capacity-building strategy.

Our research team from South Africa, India, the Netherlands, the USA, Sweden, England, and Germany, includes experts with large experience of research and policy advice in this area, and substantial prior collaboration. They can draw on large international networks to promote research uptake, including close linkages to developing country governments, international organizations, aid agencies, and NGOs. The team will be enhanced by young researchers from developing countries in all participating institutions and training of these young researchers in policy-relevant research in this area will be an important output of the program.

B1. Research problem, research questions, and justifications

Describe the problem and questions to be investigated. Explain the relevance of these and the gaps the proposed research will fill. Detail which countries will be included in the research and why. Briefly explain how these questions are well aligned with the theme of this competitive call. Clearly demonstrate how the research will add value to the existing knowledge, citing past work done on the theme and in the region (if applicable) – both by the applicant institution and other researchers. Note that this section can be supplemented through the

Max 1500 words.

While many women in low-income countries are still self-employed in agriculture, their long-term economic empowerment associated with growth and structural change will centrally depend on their ability to participate in the labor market and work in well-paying non-agricultural jobs; this promotes their economic empowerment directly, and also increases their bargaining power within households. Their ability to work in good jobs will depend on social and economic constraints to participation, occupational and sectoral segregation and associated earning gaps. Economic growth and structural change can help remove barriers, but in many contexts have done little to promote female employment. Consequently, in some developing countries economic growth has been accompanied by stagnant or declining female labor force participation, occupational and sectoral segregation has generally not fallen with economic development, and globalization and trade had mixed impacts on promoting female employment opportunities. We will focus on understanding this heterogeneity in the impact of growth and structural change on women's employment opportunities and the type of jobs they are able to get.

We do so by combining cross-country studies and comparative micro-level assessments in individual countries. In particular, we include one conceptual project that will generate hypotheses on the linkage between growth, structural change, and female employment, and focus on particularly important linkages in six empirically-oriented projects. Projects 2-3 focus on labor force participation and employment patterns, project 4 examines occupational and sectoral segregation, a key area of pervasive gender inequalities. Projects 5-7 then examine specific aspects of the growth-employment nexus, with project 5 focusing on trade policies and openness, project 6 focusing on educational policies, and project seven focusing on domestic violence as a barrier to employment. The countries have been chosen because of relevance to the call (including many low-income countries), the ability to learn from particular country experiences, comparative strengths of our research team, and data availability.

Individual projects:

- 1) What are the transmission channels from growth and structural change to women's employment and economic empowerment? How does economic growth and structural change interact with markets and formal and informal institutions at the micro, meso or macro level to produce gendered employment outcomes? This project will develop a conceptual framework and hypotheses linking economic growth, structural change, and female employment, type of jobs and pay, by drawing on insights from several fields within economics (including labor, behavioral, feminist, macro, international, and development) and other social sciences to illustrate the complexity of transmission channels. It will identify potential entry points for policy to enhance the role of economic growth and structural change for women's economic empowerment. This project will play an important role in the overall research program generating hypotheses for the other, more empirically-oriented projects. In turn, the other projects will provide feedback on the relevance of particular transmission channels.
- 2) How does growth and structural change affect female labor force participation? Building on work by Gaddis and Klasen (2014) on the feminization-U hypothesis and on hypotheses generated in project 1, we use cross-country analyses to investigate heterogeneity of the impact of growth and structural change on female labor force participation, considering a broad set of transmission channels, including the role of economic structure (e.g. export orientation) and demographic, institutional, or value changes brought about by growth and structural change. The role of policy to affect this linkage will also be investigated. Comparative country case studies using household surveys will build on work by Klasen and Pieters (2015) on India and assess the impact of economic development on female labor force participation in India, Bangladesh, South Africa, Vietnam, Bolivia, Uganda, and Rwanda. In particular, the role of key labor supply factors (e.g. household income, education, own wages, economic and social constraints to employment) as well as labor demand factors will be investigated.
- 3) How do growth and structural change affect the spatial pattern of employment? Do women and men benefit from urbanization and

agglomeration to the same extent? Growth not only affects labor force participation (project 2), but also comes with changes in the spatial distribution of people and employment, including urbanization. Using coordinated country case studies, this project will develop and analyze a number of indicators for the spatial distribution of male and female workers. We will study these for various age groups and types of workers (e.g. formal sector employment, paid informal work, and subsistence agriculture). The relationship of spatial patterns with growth and structural change will be analyzed using census data for South Africa, India, Bangladesh, Malawi, Namibia, Mozambique, Brazil, and Bolivia. These countries cover a range of growth and political experiences. Many countries (such as Malawi and Mozambique) still remain largely rural economies, generating mainly informal employment in agriculture with little change in spatial patterns. In contrast, South Africa for example has seen a slow increase in permanent urban settlement in post-apartheid years, also among females (Posel, 2010). Particular attention will be given to the scope for (spatially targeted) policies on private sector development and entry barriers in the informal and small enterprise sector.

4) How do growth and structural change affect occupational and sectoral segregation by gender? Occupational and sectoral segregation by gender in developing countries has received little attention in the literature, despite its importance for female empowerment and gender pay gaps. We will study how economic growth, structural change, trade openness, human capital, and fertility affect occupational and sectoral segregation using cross-country analyses and country case studies; the cross-country analyses will make use of the World Bank's I2D2 database which includes custom-made panel data on occupational and sectoral segregation from 63 developing countries, the largest available comparable database on this issue. In addition, we will use panel data from South Africa, Uganda, and Vietnam to study drivers of change in occupational and sectoral segregation at the household level by studying school-to-work transitions and job changes for males and females over time. Following hypotheses developed in project 1, we seek to particularly identify the drivers of segregation that are most amenable to policy action.

5) Do globalization and trade openness improve women's economic empowerment? Trade openness can greatly affect the link between growth, structural change, and female employment, as discussed in project 1. There is a controversial literature ranging from Standing's (1999) hypothesis of global feminization through flexible labor to arguments suggesting that openness destroys jobs for women. We first analyze the contribution of women and men in developing countries to value added in global manufacturing and services, building on work such as Johnson and Noguera (2012). We will show how global production fragmentation has affected women's share in value added, and analyze this for three educational groups to shed light on the role of women in low-income segments of the population. Second, we consider the causal impact of trade policies on women's employment and earnings. Building on work by Gaddis and Pieters (2014), we analyze the impact of import liberalization on female labor market outcomes in India, South Africa, and Brazil. Comparing these cases will help understand to what extent trade policy impacts depend on initial economic structure and income level, and how results might apply to other country contexts. Expected impacts in low-income contexts will further be assessed through analyses of different population segments (according to age, education, income group, race or caste) and leading versus lagging regions.

6) To what extent can promotion of female education promote women's economic empowerment? While female education levels have improved recently, low education levels in parts of South Asia and Sub Saharan Africa remain a barrier for female employment. Also, the nature of the education process can affect girls' ability to manage the school-to-work transition. Using long-run data from South Africa, we will analyze the role of over-age and repetition policies on school-to-work transitions for young women (where delayed education might clash with early fertility and marriage). Moreover, cash transfer programs can also affect educational outcomes and school-to-work transitions. We will particularly study the impact of recently implemented cash transfer programs to promote female education and subsequent employment in India. Both analyses will specifically address to what the extent the findings can be transferred to low-income settings by exploiting heterogeneity within the countries studied, and by comparing the settings with relevant low-income contexts where similar education policies and cash transfers might also be relevant.

7) How does domestic violence and female employment interact and impact female economic empowerment? There is a controversial literature on the relationship between female employment and domestic violence (World Bank 2014). Both directions of causality are

discussed in the literature but most of the literature consists of isolated case studies and causality is unclear. Building on the work by Lenze and Klasen (2013), this research project will first do parallel cross-country econometric analyses of the linkage between domestic violence and employment using Demographic and Health Surveys from Mali, Uganda, Jordan, Egypt, Bolivia, and Bangladesh, using instrumental variable techniques to address causality issues. It will also use in-depth analyses from India using field-level data on the linkage between domestic violence and types of employment, including sector of employment, seasonality, informality, and home-based work.

B2. What will the research achieve?

Describe the objectives of this research and how they will be achieved. These are the outcomes and outputs against which the success of the project will be assessed and therefore should be ambitious but feasible, specific and monitorable. These should support GrOW's outputs for research excellence, capacity building and policy uptake. Elaborate on specific activities to be carried out under these three pillars and beyond. This should describe for instance the knowledge to be generated (journal publications and working papers), forms of capacity to be reinforced, and the audiences to be reached/policies to be influenced.

Max 1500 words.

Our research program will deliver new insights on the linkage between economic growth and structural change and women's economic empowerment. In particular, it will provide answers to the question why the link has been so heterogeneous across different countries, settings, and aspects of empowerment (e.g. employment vs. segregation vs. pay). It will identify the key constraints that prevent growth and structural change to promote women's ability to enter employment at attractive conditions in sectors that match their economic interests. Thus a first key outcome of our research program is cutting-edge research in this important and highly policy-relevant field. Given the relatively sparse literature in this field, our prior work, and the ability to work together in this consortium, we expect our project to make a substantial contribution to extending the research frontier.

A second key outcome of our program is to develop and promote a policy agenda that increases the impact of economic growth and structural change on women's empowerment through attractive employment opportunities. Such a policy agenda will be developed at several levels. First, in the case-study countries included, we will develop a policy agenda suited to the country context, focussing on low-income countries. For example, in project 2 we will examine the country-specific constraints to female employment in Uganda, Rwanda, and Bangladesh: all rapidly growing low-income countries where women's employment opportunities have changed in rather different ways.

Second, our analyses from case-study countries will support a policy agenda for low-income countries not covered in the case studies. For example, the coordinated country studies on linkages between domestic violence and female employment in project 7 will distil a policy agenda that helps reduce domestic violence while promoting employment in good jobs. In these instances, the analyses from middle-income countries (such as India, Vietnam, or South Africa) will help develop policy messages for the countries concerned, but also for low-income contexts by focusing on the poor in these countries, and by emphasizing policy issues that straddle this income divide. Third, our cross-country analyses (as well as case studies) will help promote a policy agenda that can both influence the international discussion, including within international organizations, donors, and NGOs, on how to leverage economic growth and structural change for promoting women's empowerment as well as provide policy directions for policy-makers in low-income countries. For example, cross-country work on the impact of growth on female labor force participation in project 2 will inform policy-makers on the relative importance of particular transmission channels that enable growth and structural change to translate into better female employment opportunities. Similarly, coordinated case studies on globalization and trade openness in project 5 will inform the international and national policy debates on how trade policies can help promote female economic empowerment through productive employment.

Lastly, an important outcome will be capacity building. In particular, we will build up research capacity within our consortium and particularly for the junior researchers that will actively participate in the program. Moreover, we support capacity building in policy analysis and policy

development through a course for mid-level policy-makers and other local stakeholders that we will develop and implement in the context of this project.

In order to achieve these outcomes, the following outputs will be generated in the course of this project.

Research Outputs

High-quality papers submitted to top-level academic conferences and reputable international journals will be the key research outputs (see also below and the work plan for timing). In particular:

- Project 1 will develop one conceptual paper on transmission channels linking growth and structural change to women's employment, type of jobs, occupational and sectoral segregation, and pay.
- Project 2 will generate one paper that assesses the role of different transmission channels linking economic growth to female labor force participation in a cross-country context. A second paper will summarize results of coordinated country case studies identifying constraints to female labor force participation in India, Bangladesh, South Africa, Vietnam, Bolivia, Uganda, and Rwanda.
- Project 3 will generate one country case study focussing on how migration policies and spatial patterns of development affect female employment opportunities in South Africa, and one comparative analysis including India, Bangladesh, Malawi, Namibia, Mozambique, Brazil and Bolivia identifying the role of different sectoral and spatial growth trajectories.
- Project 4 will generate one paper on the drivers of occupational and sectoral segregation by gender, focusing on the direct and indirect effect of economic growth; a second paper will use panel data from Uganda, South Africa and Vietnam to analyze how occupational and sectoral segregation emerges during the school to work and job transitions for males and females.
- Project 5 will generate three country case studies on the impact of trade liberalization in India, South Africa, and Brazil, particularly also emphasizing how trade affects employment opportunities for poorer women in these contexts. Two comparative papers will be generated on the role of global value chains and trade liberalization policies for female employment.
- Project 6 will produce one paper on how the treatment of over-age students and repetition policies can affect the school-to-work transition for women, including a case study for South Africa. A second paper will examine the role of cash transfer programs in India to promote female education and their school-to work transition.
- Project 7 will produce one paper summarizing the results of comparative case studies on the effect of employment on domestic violence in Mali, Uganda, Jordan, Egypt Bolivia, and Bangladesh. A second paper will analyze the effect of sector of employment, type of work, and its interaction with household demographics and socioeconomic characteristics in India.

Policy uptake outputs

Each research paper will be accompanied by a policy brief and a short video (also available on YouTube) highlighting key policy messages for national and international policy-makers. The website where they will be placed will also feature a discussion paper series (indexed by REPEC), key research results, and project activities. A Facebook page will link to the project website. As successfully done with prior research, research results will also be fed into blogs and online columns used by development practitioners.

Four project-specific one-day policy workshops, one in the first and three in the second year, will be organized in India and South Africa, related to research projects 3, 5, 6, and 7, attended by researchers and policy makers from the region.

We will organize special sessions at several international conferences that bring together development research and policy makers (including the IZA-World Bank Employment and Development Conference, and the Poverty Reduction, Equity and Growth Network (PEGNet) conference).

Finally, selected policy makers will be involved in our opening workshop and mid-term evaluation workshop, and three policy conferences will be organized at the end of the second year, probably in Bangladesh, Tanzania, and Germany; the latter organized jointly with European donor agencies.

Our course for mid-level policy makers and members of civil society in six low-income countries will also be a way to disseminate research results and generate policy uptake.

Lastly, we will use our extensive existing networks and partnerships with policy makers in national governments, international organizations and bilateral agencies to highlight our policy messages, and members of our consortium will make themselves available for follow-up work (beyond the project) advising governments on development and implementation of particular policies.

Capacity building outputs

Research capacity building will be promoted by including Ph.D. students and post-docs, including Ph.D. students in South Africa and India. We aim to hire Southern researchers for the junior staff positions in Germany and the Netherlands, with preference given to qualified Ph.D. students from low-income countries. The senior members of our team will jointly supervise the Ph.D. students and we include funding to do joint research and move between the participating institutions. Many of the research assistants will also be students from our Southern partner institutions or developing country students studying in Göttingen and Wageningen.

Secondly, based on the results of this work and our prior research in this area, we will develop a short (3-4 day bloc) course on Gender, Growth, and Development: How Policy Can Promote Women's Economic Opportunities. This will be offered to mid-level policy makers, members of civil society, and advanced students in low-income countries, based on our past experience with such courses for policy-makers in Kenya, Zambia, and Ethiopia. It will present an overview of cutting-edge policy research in this area, include key research results, develop a clear policy agenda, and include a detailed analytical toolbox for policy development at the country level. We propose to present this course, organized in coordination with local offices of donor agencies (including DFID and GIZ local offices) and local universities, in at least 6 low-income countries, including Bangladesh, Uganda, Zambia, Ghana, Rwanda, and Tanzania. Furthermore, the course will be recorded and all material will be made available as a free online course on the project website. Interested users will be asked to register in order to get free access to the material, so that we can send them project updates and policy briefs in order to foster policy uptake.

B3. Research methodology

Describe the methodology guiding the research. This should include a brief description of the conceptual and theoretical framework, data collection approaches, methods of data analysis and modelling. Provide a justification of the choice of methods for the particular research questions and/or hypothesis to be tested and describe its advantages and limitations.

This section should also show how the research questions will be answered in the most rigorous way possible. The program encourages rigour in the evidence to be generated, diversity in methods, quantitative and qualitative, and multidisciplinary where appropriate.

Max 1500 words.

In this research program we will use a range of methods, dictated by relevance to the particular research question, available data, and the particular strengths of the team. We will discuss methodology and data use by research project. The conceptual framework that connects all projects builds key transmission channels from growth and structural change to women's economic empowerment identified in project 1. They include the role of education, labor markets, migration, and formal and informal institutions (including norms and values). While much of the proposed analyses, particularly in the empirically-oriented projects 2-7, will be based on quantitative empirical methods, the research questions and hypotheses will be driven to a considerable extent by insights from qualitative studies and literature from all social sciences. To this end, two additional consultants that are joining the research team, the political scientists and gender expert Amy Alexander, and the sociologist, economist, and gender expert Diane Elson will provide critical input to identifying key conceptual and methodological issues.

Project 1 will work conceptually and theoretically to further develop the framework linking growth, structural change, and the economic empowerment of women through productive employment, bringing together insights from different disciplines within economics and other social sciences to develop hypotheses. This will be based on a structured literature review as well as the development of a theoretical conceptual framework. In this project, inputs from our two consultants on non-economic perspectives are particularly important.

Project 2 will first do static and dynamic cross-country panel regressions using the employment data from the latest revision of the EAPAP database maintained by the International Labour Organization and matching it with data from the World Development Indicators. The comparative country case studies will use repeated cross-sections of household and labor force surveys to estimate comprehensive labor supply models, building on Klasen and Pieters (2015) for India. Analyzing the trends in these estimates and using decomposition methods, we particularly focus on how structural change and growth of female and male education have contributed to women's labor force participation and employment, how their impacts have changed over time and how they vary across countries with different growth trajectories, and what economic and social constraints hinder female employment opportunities.

Project 3 will employ descriptive econometric and decomposition techniques to analyze changes in the spatial distribution of male and female workers and its relationship to agglomeration, growth, and structural change. In particular, the research will rely on measures of spatial concentration (such as coefficients of variation and Theil indices), the relatedness of employment across space (spatial autocorrelation) (Moreno-Monroy, 2013), and whether the same patterns hold across genders and different sectors and types of work. By comparing across eight countries, the study will analyze how changes in these gender-specific spatial patterns relate to different growth and structural change trajectories. For the analysis we will make use of at least two years of data for each country. Census data for Bangladesh and Bolivia will be obtained through IPUMS, a public repository of census data. For the other six countries, the team will work on census data, income and expenditure surveys, and labor market surveys they have used before. All datasets include at least one within-country geography indicator with reasonable detail and consistent coding over time, and in some cases the codes for a finer geographic level can be harmonized using additional data sources.

Guided by hypotheses generated in project 1 and in the social science literature on drivers of occupational and sectoral segregation, project 4 will first do cross-country panel analyses based on aggregated data derived from household surveys (in particular using the World Bank's I2D2 database where data have already been extracted for this particular purpose). These data will be merged with covariates from the World Development Indicators. The regressions will seek to uncover the determinants of indices of occupational and industrial segregation (such as the Duncan measure of dissimilarity and related measures), focusing on the direct and indirect impact of economic growth and structural change on occupational and sectoral segregation. The role of education dynamics, fertility decline, changes in female labor force participation, trade openness and structural change will be examined as key transmission mechanisms from growth to segregation. We will use panel methods (including fixed and random effects) as well as GMM estimation techniques to address endogeneity issues. We also separate the analysis by country groups to see whether the results differ among low-income countries. In addition, we will study occupational and sectoral mobility and its impact on occupational segregation using household panel data from South Africa, Uganda, and Vietnam. In particular, we will first examine how occupational and sectoral segregation by gender begins with the school-to-work transition using multinomial logit models of sectoral and occupational choice. We will then study how this segregation changes as males and females switch jobs throughout their labor market careers, and how these findings depend on the policy and economic environment in the three countries.

Project 5 will first examine the participation of males and females in global value chains. This will be done at the country-industry level using the World Input Output Database (WIOD), which includes eleven developing and emerging economies for the period 1995-2009. WIOD includes socio-economic accounts with the low-, medium-, and high-skilled labor share of value added in each country-industry, which enables a tracing of global final expenditures back to the value added contributed – directly and indirectly through intermediate products – by workers in each country. Additional survey data will be used to distinguish male and female value added within each educational group,

using value added export indicators developed by Johnson and Noguera (2012) and Timmer et al. (2014). Through decomposition analyses we will isolate the contribution of changing patterns in global production fragmentation, changes in local production technology, and changes in global consumption patterns. Given availability and quality of survey data, this study will focus on India, Indonesia, and Brazil. Second, to study the gendered labor market impacts of trade policy, import liberalization in the 1990s in India, Brazil, and South Africa will be analyzed. The analysis is based on the so-called local labor market approach, pioneered by Topalova (2007). It exploits variation in exposure to trade liberalization across regions within a country to identify the causal impact of tariff reductions. Gaddis and Pieters (2014) have applied the method to analyze trade liberalization impacts on gender inequality in Brazil. The work will be extended to consider impacts on different segments of the population (according to age, education, income group, race or caste, and leading versus lagging regions), and to analyze the role of migration and occupational segregation as transmission channels. Analysis for Brazil and South Africa will be based on census data, while for India we will use the NSS Employment and Unemployment Survey.

Project 6 will use household survey data from South Africa and India to study the impact of different educational policies on educational outcomes and the school-to-work transition. Using administrative school data, Labor Force Survey data, and the earlier October Household Survey, the study for South Africa will extend birth cohort panel work by Burger, Van der Berg, and Von Fintel (2012) with a focus on the differential gender effects of over-age and repetition policies on labor force participation and unemployment. While there is evidence of long-run feminisation of the labor force (Posel & Casale, 2002), post-apartheid education and labor market policies have emphasised (inter alia) gender equity, which would likely further entrench existing effects. The study for India will focus on schemes for cash transfers made for girls in secondary school, comparing several state-level schemes with a national scheme. The main analysis will be based on impact evaluation techniques using difference-in-difference analysis for girls of different cohort and across districts to identify project impacts. Both studies will also consider different income and race or caste segments of the population to gain more insight into the potential impacts of educational policies in low-income settings.

Project 7 will, for the comparative case studies, draw on Demographic and Health Surveys for the six countries listed, which have detailed modules on domestic violence. Econometric models of domestic violence including economic, social, and demographic determinants, which have been identified in the sociological, economic, and psychological literature on domestic violence, will be estimated, differentiating between emotional, physical, and sexual violence. To control for the endogeneity of the employment status, household level variables as well as cluster-level variables will be used as instruments (building on Lenze and Klasen, 2013) to estimate causal effects of employment on violence. The India case study will be based on micro data custom-generated for the assessment of the relationship between domestic violence and female employment. Pilot surveys in Orissa by the DSE team found much less violence among artisans than among households in agriculture, and less during harvest seasons when there was more employment. These issues will be further analysed, focussing on the employment-violence relationship at different phases of the economic cycle, as well as work in different occupations and sectors (including household-based industry, artisans, workers in agriculture, and other employed females).

B4. Strategy for research uptake.

A well-articulated research uptake strategy must be outlined and represented in the budget. Indicate how the research results are likely to be used and what their expected impact might be. Indicate who your intended audience(s) is/are at the international, regional or local levels and why. Explain how the research findings will be synthesized and disseminated, and how and when your target audiences will be engaged throughout the research cycle using a range of outputs, tools and approaches. Describe your plans to monitor the implementation of your research uptake plans. You can suggest quantitative and qualitative indicators you intend to use to monitor expected outputs on uptake. The strategy should demonstrate a feasible, monitorable and ambitious commitment to informing policy and/or practice.

Max 1500 words.

We hope that our research results will:

a) foster an understanding among policy makers at the national and international level that economic growth and structural change needs to be accompanied by a supportive policy environment to ensure that it will have a sizable impact on female economic empowerment;

- b) provide entry points for policy to promote a greater impact;
- c) promote specific new policy interventions that can enhance these impacts and
- d) influence on-going policy initiatives (e.g. in the areas of trade, labor market, industrial, education, and migration policies) to ensure that they strengthen the link between growth and women's economic empowerment.

A key target audience are national policy makers in low-income countries in key economic ministries (e.g. finance, development planning, economic affairs) as well as labor and gender ministries. We hope that they will be able to use these results to design macroeconomic, trade, industrial, labor market, and sectoral policy to promote a greater impact of economic growth on female employment and women's empowerment. A second key target audience are actors in civil society and academia in low-income countries who have a substantial influence on policy making through their lobbying and policy-advisory work. A third key target audience are international development partners in international organizations (e.g. World Bank, IMF, regional banks, UN system) as well as bilateral donors who are looking for ways to leverage growth to promote women's economic empowerment.

We will engage with these stakeholders in the following way. Already at our initial opening workshop, we will invite representatives from our three target audiences to comment on our research plans, initial hypotheses on transmission channels from economic growth and structural change to women's economic empowerment, and expected outputs; similarly, we will involve them in our mid-term workshop and evaluation to seek their feed-back and comments on initial results and research planning.

More detailed engagement with local policy-makers on specific policies will take place in the four planned regional policy workshops in India and South Africa planned around research projects 3, 5, 6, and 7 where initial results are discussed with policy-makers from the region. These workshops will be based on existing close links of our Southern partners with policy-makers in their respective region. In particular, our partners in Stellenbosch, Delhi, and Cape Town have regular interactions with policy-makers in their country and in neighbouring countries and these policy workshops will build on these existing networks to discuss policy issues emanating from these specific research projects.

Our short course will be another way to engage with a broad range of local policy-makers, members of civil society (including also women's groups) and academia in low-income countries. Based on our experience in the past of running such courses, we have found that such courses lead to a more sustained interaction and engagement with local stakeholders that can promote sustainable policy take-up in future. To further support the policy impact of these courses, we would organize them in conjunction with local development partners (in particular local offices of DFID and GIZ) and seek their active involvement and buy-in. We would also cooperate with local universities to run these courses, and make ourselves available for follow-up policy advisory work beyond the end of the project to assist further policy uptake at the country level. The courses would be offered in six low-income developing countries, and all course material will be available for free (upon registration) on our website, so we can reach interested policy makers and civil society members in any developing country.

The Ph.D. students educated as part of this program (as well as other M.A. and Ph.D. students from developing countries studying in our institutes and learning about the project results) will provide a further avenue for policy-uptake. Many of them return to their country of origin or join international agencies. They can be very influential in affecting long-term policy uptake of research results.

Lastly, our policy conferences at the end of the project in South Asia and Sub-Saharan Africa will distill key policy messages, engage with local policy-makers and civil society actors, and establish links for policy uptake that can extend beyond the project duration itself. During the workshops, engaging with local media, using local policy websites and blogs, will help promote policy discussion beyond the narrow policy-making circles which is of particular importance in this research topic.

We will aim to promote policy uptake at the international level using the just-discussed channels, but different channels are likely to be

relatively more important. Here the role of special sessions at international conferences where researchers and policy-makers interact (including the Annual Bank Conferences on Development Economics, the PEGNet and IZA-World Bank conferences) will play an important role, as will our working paper series, our videos, and our blog contributions. Using existing blogs such as the World Bank, the Center for Global Development (where Klasen is a fellow), Ideas for India, we are likely to generate interest and discussion in the global development and research community, as we have experienced in the past.

Finally, our network of engagement with policy-makers at different levels will play a key role in helping promote policy-uptake. At the international level, our regular interactions with the organizations such as the World Bank, UNDP, UNESCO, OECD Development Center, the International Growth Center, and bilateral aid agencies as well as international NGOs and policy think tanks (such as ODI or the CGD) will generate entry points for disseminating our research and promoting the key policy messages emerging from our research agenda. Since some of the team members are directly working for international agencies or advisory bodies, such as the World Bank Gender Cross-Cutting Solutions Area or the UN Committee for Development Policy, take up will be facilitated this way as well.

We will monitor research uptake in several ways. First, we will monitor use of our website, documents, videos, and other materials. Second, we will, at the end of the project, provide a short evaluation to document which policy documents at the national and international level have drawn on the research results produced by this project. We should note, however, that we expect that policy uptake will only start to develop towards the end of the project and much will occur after the completion of the project. In order to track progress, we will keep the basic monitoring infrastructure for uptake in place for at least one more year.

Res Descrip 2

B5. The research team and project management

Describe the research team and how individuals and institutions will collaborate to achieve the project outcomes. Describe any administrative arrangements (including with third parties) and how this structure is intended to help achieve project outcomes. In the case of partnerships, explain what the added value of each institution is and how collaboration will be ensured.

Describe the relevant skills, roles and responsibilities of members of the research team. A two page CV of each should be attached which should include a summary of relevant research publications.

Max 750 words.

Our team combines researchers from the Universities of Cape Town and Stellenbosch (South Africa), Wageningen University (Netherlands), Delhi School of Economics (India), and University of Göttingen (Germany). In addition, Isis Gaddis, working in the World Bank Gender Cross Cutting Solution Area, will join the project as a consultant (in her individual capacity). To add a vital interdisciplinary perspective to our program, the team includes Prof. Amy Alexander, a political scientist and gender expert from the University of Gothenburg, and Diane Elson, a sociologist and gender expert from the University of Essex. They will join as consultants to advise on research plans, actively participate in research and policy workshops, and evaluate progress during a mid-term evaluation. The project will be lead managed by Stephan Klasen (University of Göttingen).

Klasen has worked and published widely on causes and consequences of gender gaps in developing countries, has run research programs in this area, and has consulted for many international organizations, bilateral donors, and developing country governments. Pieters (Wageningen) has worked, with Klasen, on drivers of female labor force participation and, with Gaddis (World Bank), on the role of structural change and trade liberalization on women's labor market outcomes. She managed the IZA-DfID program on Growth and Labor Markets in Low Income Countries. Gaddis has worked with Klasen on the impact of economic development on female labor force participation, and with Pieters on the gendered impacts of trade liberalization. Somanathan (Delhi) has worked extensively on inequality and gender issues in India, including the role of microfinance and self-help groups in promoting women's empowerment. Van der Berg

(Stellenbosch) has worked on educational policy and poverty in Southern Africa, including the link between education and school-to-work transition, and the economic position of children, which has clear similarities with the position of women. Edwards and Sundaram (Cape Town) have worked on the impact of trade liberalization on firms and labor markets and on migration issues. All these senior researchers have published in high-level international journals but also advised international organizations, bilateral donors, NGOs or civil society groups, and developing country governments.

We would all bring junior researchers (mostly Ph.D. students) to contribute to the project, which increases output but also significantly enhances capacity building, particularly since a majority of Ph.D. students at the different institutions are from developing countries.

The work of our consortium can build on substantial prior collaboration. Gaddis, Klasen, and Pieters have collaborated on research directly related to this call. Pieters and Edwards have started collaboration on labor market impacts of trade, and Klasen has worked with researchers in Cape Town for several years. Göttingen and Stellenbosch have a double-degree program in development economics initiated by Van der Berg and Klasen who have also collaborated on research in the past. Somanathan and Klasen plan to work together on domestic violence issues in India as well as on female employment issues there.

5 of the 7 projects include research collaboration within the project, often building on existing collaborations. To further intensify and manage collaboration, the following steps will be taken:

First, we will deal with contractual matters immediately after the funding decision (based on extensive experience we have on multi-partner consortia). Second, we will organize an opening workshop of all consortium participants in Göttingen, including consultants, shortly after the beginning of the funding period. The workshop will also include selected policy-makers (from donors and developing country governments) to explicitly include a policy perspective into the research program. At the workshop we will finalize the detailed program and work plan, and discuss research implementation issues. Furthermore, initial hypotheses on transmission channels from economic growth and structural change to women's economic empowerment, based on preparatory work for project 1, will be presented and discussed. These hypotheses will help guide the research for the empirically oriented projects.

Progress monitoring will be achieved by a detailed time-bound work plan for each output. This will form the basis of the monitoring and the semi-annual short reports of consortium members to the lead organization. At mid-term, we will organize a second consortium meeting in the Netherlands, which will include a mid-term evaluation by a team of consultants including Amy Alexander, Diane Elson, a development economist, and a development practitioner from a developing country. We will invite selected policy-makers and donor representatives to get feedback on preliminary results. This workshop and evaluation will also be used to fine-tune activities in year 2, where completion of the research agenda, policy uptake, policy workshops, and the short course will assume a higher priority.

B6. Commitment to southern partnerships and capacity building.

Describe how the project intends to collaborate with southern researchers or southern research institutions. Indicate how the project might contribute to building capacities, in particular of southern partners or less experienced researchers or team members to not only contribute to the research process but also facilitate the uptake of results. Describe specific activities and what they aim to achieve. If there is an associated training cost, this should be reflected in the budget.

Max 750 words.

Our research proposal is based on a partnership between 2 "Northern" and 3 "Southern" research institutions. As can be seen from the all project activities, including research dissemination, policy uptake, and capacity building, all partners are fully involved in all project activities. Thus collaboration between Northern and Southern, as well as between the two Northern and between the Southern, institutions is in-built into the research process and into all other project activities. We also do not consider any need for "capacity-building" of the senior researchers in the Southern institutes, given their research excellence and track record in research and policy advice. In fact,

learning can take place on all sides and the project will greatly benefit from both the research excellence of the Southern partners as well as their experience and access in policy uptake. As discussed above, this local expertise will be drawn upon (particularly in the local policy workshops but also beyond) to maximize policy uptake.

Capacity building does enter the research proposal when it comes to promoting research and policy careers of promising young researchers from developing countries, with a particular emphasis on junior researchers from low-income countries. Here we will promote such capacity building through the following measures:

1) Our Southern partners will ordinarily recruit Ph.D. students and research assistants from their pool of promising applicants that usually originate from their own country or (low-income) neighbouring countries. Work on such a research project is an excellent way to start or make progress on a Ph.D., as it will generate stimulating research questions, access to data, funding, and supervision by senior researchers with a keen interest in project success.

2) Additionally, also in Göttingen and Wageningen, we will make efforts to recruit Ph.D. students and Post-Docs primarily from a pool of high quality developing country students, with preference given to low-income applicants. Both universities have a strong track record in this area and have a broad network through current collaborations (including the consortium for this program) and alumni that will be called upon to recruit junior staff for this program. MA level research assistants can often be developing-country students in our MA programs focused on development.

3) We will further strengthen the capacity building described in points 1) and 2) through joint supervision and mobility of junior staff across the participating institutions; we have budgeted for such visits. Such research and training visits will be an excellent way for the Ph.D. students and Post-Docs to develop their academic skills and broaden their networks, through joint research and through advanced courses in development at the host institutions.

Another key capacity building activity will be the short course on Gender, Growth, and Development. The course will be offered to policy makers and civil society members as well as interested advanced students in at least 6 low-income countries (Bangladesh, Uganda, Zambia, Ghana, Rwanda, and Tanzania), and course recordings and other materials will be available on our project website. This course will not only highlight key results of the research and propose policy approaches to harness growth for the economic empowerment of women, but also provide analytical tools for country-specific analyses and policy development. This way we will aim to strengthen analytical and policy-making capacity in this research and policy area, enabling local academic and non-academic stakeholders to have the analytical tools and the knowledge of research results in this field to develop and plan policies.

B7. Access and data management strategy

GrOW is committed to ensuring research outputs which are developed by funded researchers are made available pursuant to open access principles. Please describe your strategy for ensuring open access to research outputs and data, specifically when a key output of the project is publications in peer reviewed journal

Max 500 words

We are fully committed to provide open access to our research results as well as the data that were used to generate the results. In particular, the following steps will be taken to ensure that access is as open and transparent as possible:

1) All our research results will be made available through open access discussion papers and policy briefs early in the research process; thus there will be no paper that does not go through this stage to ensure open access to the results. These discussion papers, policy briefs, and accompanying videos will be made available at the project website as soon as complete drafts that meet internal quality control criteria are available. We thus expect that nearly all outputs will be available before the end of the project-funding period.

2) We will seek publication in academic journals of all our research papers. This will usually involve substantial revisions and further work so that the published academic papers might be substantially different to initial working papers; and since many prestigious academic outlets are not open-access, this might reduce access to our results published there. To reduce this problem, we will, firstly, publish an

updated version of the open-access discussion paper that reflects changes made during the referee process. Second, to the extent possible within the constraints of seeking high-quality outlets, we will seek open access outlets or outlets where access in developing countries is free or heavily subsidized (e.g. in the case of World Development). Third, we have budgeted €20,000 to allow open access to papers that are published in journals where open access is only available for a fee.

3) Regarding data access, we should first point out that most of the data that we will be using is publicly available primary data, such as household surveys, censuses, and aggregate data. Thus data access in those areas is not a problem. Nevertheless we will make the final dataset and the final do-files of our analyses available on the program web site, as soon as a final version has been produced. This might be beyond the project duration if we are seeking an academic publication and our analyses will change beyond the working paper stage. But we will ensure that all information (final data set and do-files containing the final analyses that are presented in the paper) is available for replication at the project web site as soon as a paper is accepted for publication. One restriction will have to apply: For some data that we use but did not generate ourselves, we have to ask for permission of the data generators to publish these data. If the permission is denied, publication of these data has to be restricted. This might, for example, be the case of certain household surveys or micro data from the World Bank's I2D2 database. In those cases, we publish our do-files and point to procedures for data access of the underlying surveys.

B8. Risk and risk mitigation strategies.

Outline all possible political, reputational and operational risks associated with the project and strategies for mitigating these. This applies to both the research process and the dissemination of results.

Max 500 words.

There are a few project risks that we will have to face and our proposal has already taken concrete steps to mitigate them. These risks and proposed mitigation strategies are:

1) Lack of data access. There is a small risk that some of the country case studies will be difficult to do due to missing data access. To minimize this problem, we have already investigated data access and in many cases we already have the required data. In others, we know the process of obtaining them.

2) Delays in analysis, particularly due to complex data harmonization or fieldwork. There is a risk of delay due to the complexity of preparing data for analysis, including primary and secondary data we plan to use. We see this risk to be manageable as we all have substantial experience in this type of data analysis. To partly mitigate the risk, a considerable amount of data we rely on we have analyzed already before in the context of different research questions, or preparatory work for this proposal, and thus are familiar with the data. To the extent possible, we will try to advance this crucial data management work, even before the actual grant period starts.

3) Delays and problems with research collaboration. As our project depends on successful collaboration between all project partners, delays and problems in collaboration could delay and possibly undermine the project. To mitigate this, we formed a consortium consisting of partners with substantial prior collaboration. We will also build in flexibility in project management to allow shifting resources and adjusting research plans should we run into difficulties with a particular partner or project.

4) Problems with policy uptake. Achieving successful policy uptake of our results is challenging and depends not only on the quality of research and its dissemination, but also on the interest and demands of busy policy-makers. To mitigate this, we will rely on existing networks that link research with policy-makers where we have had successful interactions before. Those networks include our involvement in the UN Committee on Development Policy, our working relationship with the UNDP's Human Development Report Office, the OECD Development Center, the institutions of German development cooperation, the International Growth Center (particularly the

India office), the Government of South Africa, and local offices of donors (particularly GIZ) in many low-income countries. Also, we will present our results at fora where researchers and practitioners regularly meet (including PEGNet, the IZA/World Bank conference, and the like). Drawing on these networks and using these fora will generate entry points we can use for dissemination activities and work on policy uptake. Lastly, we will also be available for further work, beyond the life of the program, with governments in developing countries to develop more detailed policies suitable for the country context. We have experience of such policy advisory work in Indonesia, South Africa, Bolivia, Uganda, Zambia and Kenya. Thus we can offer ways to promote policy uptake that runs beyond the (relatively short) life of the research program.

B9. Ethical considerations.

GrOW will promote strong ethics practices. Please identify possible ethical risks associated with the projects and summarise some of the mitigation strategies that will be adopted. Projects that will collect corporate or personal information must details how informed consent will be obtained, confidentiality maintained and data stored during and after the project. Please highlight whether the proposals will be/has been submitted to an ethics review board.

Max 500 words.

The project will largely rely on primary and secondary data that has been made available to us; these data have been generated with informed consent of the involved populations. At the same time, we will make all efforts to maintain confidentiality of any household survey information. To ensure this (while still maintaining as much open access as possible), we will only publish as much of the household survey data online, as is already publicly available. When publishing data, we will only publish final datasets with a reduced set of variables (limited to those used in the analysis) that will not enable the tracing of individuals. Any household location and other identifiers will not be made available.

A small portion of the project activities in India (in project 5 and 7) will fund limited primary data collection activities, for which, if required, ethical clearance from Delhi School of Economics will be sought.

Page 6

SECTION D - PERMISSION TO SHARE INFORMATION

By way of submitting an application under this call for proposals, the applicant consents to the disclosure of the documents submitted by the applicant to the reviewers involved in the selection process, both within IDRC and externally. If selected, the applicant further consents to the disclosure of the name of the applicant, the name of the principal investigator and the title of the proposed project in any announcement of selected projects.

Unsuccessful applications will be destroyed within 180 days after the close of the application period.

Responses Selected:

I agree with the terms and conditions outlined above

Save and Exit

Selecting **save and exit** (below) will complete this form, save its contents, mark the task complete, and return you to your home page to continue with the application process.