

# Peter Brueckmann

## Profile

Peter is a data analyst and survey expert advising national statistical offices, international organizations and research institutes on impact assessments, data collections, and data management. He is deeply familiar with all stages of the survey cycle and aims to enhance data quality through reproducible data processing and monitoring systems. He enjoys developing tools that make it easier for people to use data effectively. Recently Peter got particularly intrigued by developing web applications in R Shiny and developed a soft spot for clean csv-files.

## Professional Experience

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|--------------|---|
| 2021 to date | RowSquared<br><i>Co-founder, Data Analyst</i>   |
| 2019 to date | Independent Survey and Data Analyst Consultant <ul style="list-style-type: none"><li>• Supporting clients in CAPI programming, field monitoring, quality assurance and data management</li><li>• Developing reproducible data quality tools and data pipelines</li><li>• Data visualization</li></ul>   |
| 2017– 2019   | International Fund for Agricultural Development (IFAD), Rome, Italy<br><i>Research Officer</i> <ul style="list-style-type: none"><li>• Provided technical support on impact evaluations in two projects in Jordan and Indonesia.<ul style="list-style-type: none"><li>▪ Developed the research design and sampling strategy. Designed quantitative and qualitative questionnaires and interview guidelines.</li><li>▪ Trained enumerators and supervised data collection. Performed data analysis and drafted reports, policy briefs and infographics.</li></ul></li><li>• Designed a high-frequency data quality system for data collections</li><li>• Conducted pre-testing, enumerator training and supervision of data collection in Bangladesh. Supported scripting of questionnaires, field management and data cleaning for data collections in eight other countries.</li><li>• Trained IFAD staff on using the software packages Survey Solutions, R and Stata for data capturing, data quality monitoring and econometric analysis</li><li>• Standardisation of in-house data collections: drafted quantitative questionnaire templates for agricultural household surveys, data, and folder management; improved and harmonised Stata do-file syntax.</li><li>• Developed two chapters for an IFAD publication on impact assessments</li></ul> |
| 2015– 2016   | University of Göttingen, Germany<br><i>Research Assistant</i> <ul style="list-style-type: none"><li>• Supported the design and implementation of a randomized controlled trial on safe childbirth in Pakistan</li><li>• Cleaned and analysed data on obstetric care.</li><li>• Drafted manuscript for publication.</li></ul>  |

## Education

2013 - 2016	University of Göttingen, Germany M.A. Development Economics
2009 - 2012	University of Marburg, Germany B.Sc. Economics

## Languages

German (Native), English (Fluent), French (Basic)

## Countries of Work Experience

Bangladesh, Cabo Verde, Ethiopia, Germany, Ghana, Indonesia, Jordan, Kenya, Kiribati, Kyrgyzstan, Lesotho, Malawi, New Caledonia, New Zealand, Pakistan, Tanzania, Togo, Tunisia, United Kingdom, United States, Vanuatu

## Skills and Software

STATA, R, MS Excel, Survey Solutions, Power BI, QGIS, Google Sheets, LaTeX, Amazon AWS, Docker, Dashboards, Data Collection, Data Quality Control, Maps, Data Processing

## Peer-Reviewed Articles and Technical Reports

**Brueckmann, P.**, Hashmi, A., Kuch, M., Kuhnt, J., Vollmer, S. (2019) '[Public provision of emergency obstetric care services in two districts of Pakistan: Evidence from Nowshera and Haripur](#)' *BMJ Open*.

Cavatassi, R., Mabiso A., **Brueckmann, P.** (2019) '[Impact Assessment Report. Republic of Indonesia. Coastal Community Development Project](#)'. *IFAD*, Rome, Italy.

Cavatassi, R. and **Brueckmann, P.** (2018) 'Impact Assessment Baseline Report. Hashemite Kingdom of Jordan. Rural Economic Growth and Employment Project'. *IFAD*, Rome, Italy.

Cavatassi, R., **Brueckmann, P.**, McCarthy, N. and Bonilla, J. (2018) Chapter 6 and 7: 'Kenya's Smallholder Dairy Commercialization Programme' and 'Madagascar's AD2M-I Project'. [Effective rural development: IFAD's evidence-based approach to managing for results](#), *IFAD*, Rome, Italy

## Stata routines

[sursol](#) - Commands for integrating Survey Solution's server, field, translation, and data management in Stata

## Project Experience

Project	<b>Maldives Census 2021</b>
Client	Maldives Bureau of Statistics / UNFPA
Year	2021
Country	Maldives
Details	The Maldives Bureau of Statistics is preparing the 2022 Population and Economic Census that will be conducted electronically for the first time. Rowsquared is providing technical support to MBS, including the development of the questionnaires, CAPI and CAWI tools, protocols, manuals, data pipelines, data management, progress tracking and quality assurance.
Role	Survey expert - Questionnaire review, CAPI/CAWI set-up, CAPI coding, data pipeline design, quality assurance
Project	<b>COVID-19 Food Market Resilience Surveys</b>
Client	Global Alliance for Nutrition (GAIN)
Year	2021
Country	Bangladesh, Ethiopia, Kenya, Mozambique, Nigeria, Tanzania,
Details	GAIN is conducting high frequency surveys in five countries with consumers and vendors to assess the physical state, functioning and resilience of food markets and market actors under COVID-19. rsquared is supporting GAIN in the management and quality control of the data collection firms, the instrument development and the data analysis. rsquared has developed data pipelines and developed semi-automatic reports that allow rapid assessment and dissemination of the incoming data.
Role	Data analysis expert – coordinated local data management firms, compiled, cleaned and harmonised country data, analysed and visualized in-country and cross-country market survey data, set up analysis dashboard tools
Project	<b>Population and Housing Census in Marshall Islands, Nauru, Tonga, Cook Islands and Tokelau</b>
Client	Statistics for Development Division of the Pacific Community
Year	2021
Country	Marshall Island and Nauru
Details	The census surveys interviewed all households in the small island countries on detailed household, demographic, and socio-economic characteristics, including labour, fertility, and health.
Role	Survey expert – reviewed CAPI instrument, established high-frequency data quality tool for daily in-field census monitoring, deployed monitoring dashboards for local statistical offices, responsible for data management and processing, census data tabulation
Project	<b>SDG16 Survey-Based Indicators</b>
Client	UNDP, UNODC, OHCHR
Year	2021
Country	Cabo Verde, Tunisia, Kenya, El Salvadore, Togo, Tanzania, Kazakhstan
Details	The project prepared a dedicated 'SDG 16 survey module' to be implemented as stand-alone or to be included in household and other relevant statistical surveys

that enables the collection of nationally representative and internationally comparable statistics for monitoring of progress on SDG 16. During pilot phase, the instrument and its script was validated in six countries simultaneously, both face-to-face and via phone interviews using Survey Solutions.

**Role** CAPI and CATI expert – developed CAPI/CATI template, coached National Statistical Offices in Survey Solutions, prepared chapter of survey manual, drafted CAPI/CATI design manual, supervised data collections

**Project Malawi Public Schools Survey**

**Client** Center for Evaluation and Development / World Bank

**Year** 2019, 2020 and 2021

**Country** Malawi

**Details** Mid- and end line of the Malawi Public Schools Survey. Each survey round visited 300 schools and included 14 different instruments. The survey interviewed head teachers, teachers, students, and community members, conducted teacher and student tests as well as school and classroom observations. Data was captured both on paper and tablet using Survey Solutions. Teachers and students from baseline were tracked across the country. Each round included about 20.000 interviews and data entry forms, collected within a short timeframe, posing a particular challenge on data quality assurance and management.

**Role** Survey and Data Manager – scripted CAPI and data entry forms, conducted enumerator training, developed data quality assurance as well as tracking system, deploying separate dashboards for clients, field manager and supervisor, responsible for data management and developing tools and applications to facilitate field communication

**Project Impact assessment of rural development projects in Ghana, Tanzania, Kenya and Djibouti**

**Client** IFPRI

**Year** 2020, 2021

**Country** Djibouti, Ghana, Kenya, Tanzania

**Details** The survey captured data from rural farmers and community leaders across the countries, including household, demographic and socio-economic characteristics and detailed information on agricultural and livestock production. In addition, a dedicated module for women empowerment in agriculture was scripted.

**Role** CAPI expert – developed CAPI instrument of complex agricultural questionnaire, set-up of CAPI system, deployed data quality and field monitoring dashboard

**Project Population and Housing Census in Kiribati and Vanuatu**

**Client** Statistics for Development Division of the Pacific Community

**Year** 2020

**Country** Kiribati and Vanuatu

**Details** The census surveys interviewed all households in both countries on detailed household, demographic, and socio-economic characteristics, including labour, fertility, and health. In total, 80,000 observations within three weeks were captured.

**Role** Survey expert – reviewed CAPI instrument, established high-frequency data quality tool for daily in-field census monitoring, deployed monitoring dashboards for local statistical offices, responsible for data management and processing, census data tabulation, developed [web application](#) for dissemination of census results

Project	<b>Continuous Multipurpose Household Survey 2020</b>
Client	Bureau of Statistics of Lesotho
Year	2020
Country	Lesotho
Details	The survey captured detailed demographic and socio-economic characteristics both at the household and individual level, including labour force, employment, education, fertility, anthropometrics, and governance. The sample consisted of 4.300 households and was representative at the national level. CAPI script included advanced random selection of household member and anthropometric z-score algorithms for validation. After completion, Bureau of Statistics staff was trained on the use of Survey Solutions.
Role	Survey Expert -reviewed and scripted CAPI instrument, set-up of data quality assurance system and dashboard, data monitoring, carried out two-week workshop on Survey Solutions
Project	<b>Malawi Longitudinal Schools Survey</b>
Client	World Bank
Year	2020
Country	Malawi
Details	As part of the impact evaluation of the Malawi Education Sector Improvement Project, the survey captured longitudinal data on 900 schools in Malawi. Each survey round included multiple instruments administered at each school. Baseline was fully done on paper, mid- and end line both on paper as well on tablets which posed a particular challenge on data management and harmonization.
Role	Research Associate – harmonized data from multiple rounds, provided guidance on integration of future data, improved data pipeline
Project	<b>Sustainable Use of Rehabilitated Land for Economic Development (SURED) Project</b>
Client	GIZ
Year	2019, 2020
Country	Ethiopia
Details	The survey is part of the evaluation of the SURED project and included a baseline and midline survey of 400 households to estimate the effects of the project on rural small-scale farmers. The questionnaire contained detailed agricultural and livestock sections and was administered using Survey Solutions. In addition, the assignment included a two-day workshop on Survey Solutions for local GIZ staff.
Role	Survey and Research Manager – developed quantitative instrument and scripted CAPI form, supported sampling, set up of automated data quality assurance systems and dashboard, trained field staff, field and data monitoring, conducted data cleaning and analysis, carried out Survey Solutions workshop
Project	<b>Africa and global actors - Identifying patterns of international engagement</b>
Client	German Development Institute
Year	2019
Country	Germany
Details	Online survey to analyse the relevance and impact of external actors in African countries and the continent as a whole. The survey captured opinions and insights in a both quantitative as well as qualitative manner from international experts and

	<p>researchers. The questionnaire was scripted using Survey Solutions and hyperlink was disseminated through Amazon SES.</p>
Role	<p>Survey Manager – developed instrument, scripted CAWI form, set up server and Amazon SES for dissemination, responsible for data monitoring, cleaning, and descriptive analysis</p>
Project	<p><b>Impact assessment of the Coastal Community Development Project (CCDP)</b></p>
Client	<p>IFAD</p>
Year	<p>2018</p>
Country	<p>Indonesia</p>
Details	<p>CCDP was designed to reduce poverty and enhance sustainable and replicable economic growth in coastal and small island communities. The survey interviewed 2,800 fishermen and 90 community leaders. A new in-depth questionnaire on fishery and aquaculture had to be developed. Field teams were scattered across large distances lacking reliable internet connection, which posed a particular challenge to field management and data quality monitoring.</p>
Role	<p>Survey and Research Manager –developed Impact Assessment plan and both quantitative and qualitative instruments, carried out field staff training, responsible for data quality monitoring, cleaning, and analysis, co-author of final reports and result dissemination documents</p>
Project	<p><b>Impact assessment of the Rural Economic Growth and Employment Project (REGEP)</b></p>
Client	<p>IFAD</p>
Year	<p>2017 - 2018</p>
Country	<p>Jordan</p>
Details	<p>The REGEP aims at increasing agricultural income of small-scale producers of high water value crops and of rural entrepreneurs in Jordan. The baseline survey interviewed 1,800 rural farmers. In addition, Key Informant Interviews and Focus Group Discussions were carried out.</p>
Role	<p>Survey and Research Manager –developed Impact Assessment plan and instruments, carried out enumerator training, responsible for data quality monitoring, cleaning, and analysis. Co-authored baseline report.</p>
Project	<p><b>Impact Evaluation of the WHO Safe Childbirth Checklist</b></p>
Client	<p>University of Göttingen, GIZ, WHO</p>
Year	<p>2015</p>
Country	<p>Pakistan</p>
Details	<p>The randomized controlled trial aimed at identifying the causal effect of the implementation of the WHO Safe Childbirth Checklist by public health providers in Pakistan. The survey focused on interviewing Community Midwives, patients as well as health facility observations in two provinces of Pakistan.</p>
Role	<p>Research Assistant - supported survey design and instruments, conducted field staff training, responsible for field monitoring, data collation, cleaning, and analysis, drafted manuscript for publication.</p>