

CURRICULUM VITAE

Proposed role in the project: Key Expert
Category: Category I
Family name: TEMEL
First name: Tugrul
Date of birth: January 6, 1960
Nationality: Dutch (Turkish at birth)
Civil status: Married
Education:

Institution [Date from – Date to]	Degree(s) or Diploma(s) obtained:
University of Minnesota, USA [1988 – 1995]	Ph.D. in Applied Economics
University of Minnesota, USA [1988 – 1994]	MS in Economics
Middle East Technical Univ., TURKEY [1986 – 1988]	MA in Economics
Middle East Technical Univ, TURKEY [1980 – 1985]	BS in Economics
Gazi University, TURKEY [1977 – 1980]	BS in Social Science

Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
Turkish	Mother tongue	Mother tongue	Mother tongue
English	1	1	1
Azeri	1	1	1
Dutch	2	2	2
Japanese	3	3	3

Membership of professional bodies (selected):

Editor/Editorial Board: Int'l Journal of Agriculture, Resources, Governance; Journal of Central Bank Review; Minnesota Journal of Global Trade. *Membership:* American Assoc. of Economists; European Assoc. of Agricultural Economists; American J of Agricultural Economics; Western Economics Assoc. International; Southern Regional Science Assoc. *Referee:* Acta Tropica, American Journal of Agr. Economics, Agr. and Resource Economics Review.

Other skills (e.g. Computer literacy, etc.):

Development and use of econometric & statistical methods; Software mastered: Mathematica, STATA, E-views;

Key qualifications:

Substantial knowledge and experience gained in international research and development organizations:

- national and global agricultural policy analysis in relation to Sustainable Development Goals (including poverty reduction, food and nutrition security) and agricultural innovation systems for sustainable economic growth; design of action plans for public investment in agricultural sector and food-nutrition security in the countries of Central Asia and the Caucasus (Azerbaijan, Georgia, Armenia, Kyrgyzstan, Tajikistan, Uzbekistan), and Sub-Saharan Africa (Rwanda, Tanzania, Ethiopia, Mali, Ghana, Burkino Faso, Nigeria);
- ministerial level capacity building and academic training of lecturers in data framework development and their use in policy making in collaboration with National Statistics Offices, Ministries of Finance, Economy and Agriculture, National Universities-Applied Statistics, International Organizations such as the World Bank and UNDP-Statistics Division. Experience in the development of SNA and SAM for Angola and Rwanda.
- scenario analysis of competition policy reforms in Middle East and North Africa countries by developing a computable general equilibrium (CGE) model and an input-output model.
- developing web-based software for the compilation and Bayesian estimation of system of national accounts (SNA) and conversion of SNA into social accounting matrix (SAM) for policy analysis. Expertise in using SNA 1993 and 2008 of UNDP in research and capacity building. and the development of competition policy reforms in Middle East and North Africa countries.
- conducting academic research on Rwandan economic growth, human capital and fertility linkages; managing research capacity building projects in national university of Rwanda; conducting capacity building training programs for experts and policy makers from the Ministry of Agr. and Ministry of Econ. & Finance of Rwanda;
- ICT infrastructure and use in agricultural information-innovation systems; food and nutrition security information systems; informed agricultural policy making;

- Information and innovation system institutions and laws for supporting ICT policy in developing countries; ICT infrastructure in agricultural knowledge transfer and agri-food value chains; developing integrated approaches to agri-food value chain development;

Advanced technical skills and experience in

- developing and applying theoretical (qualitative and quantitative) methods and frameworks in M&E projects; survey designs and implementation of on-line systems for impact assessment of EU FP7 in Turkey;
- communicating M&E concepts, project findings and analysis clearly and simply with high-level policy makers, decision makers and practitioners of development programs;

More than 27 years of experience in

- carrying out M&E projects and hands on training in organizational and system M&E and priority setting; managing multi-disciplinary teams; publishing in peer reviewed journals and presenting findings from applied research in M&E professional conferences;
- institutional analysis and research capacity building in the countries of Central Asian and the Caucasus, Middle East and sub-Saharan Africa;

Over 23 years of experience in

- assessing EC-funded Calls for Proposals, preparation of EC-funded project proposals (grants, service tenders);
- managing and evaluating EC-funded grant and service contracts, thus demonstrating excellent knowledge of EC external aid procedures (PRAG, PCM, Logical Framework approach);

Professional experience

Date from – Date to	Location	Company	Position	
December 2023– May 2024	Ankara-Turkiye and Amsterdam-Netherlands	The World Bank 1818 H Street, NW Washington, DC 20433 USA Dr. Paul Phumpiu Chang T +965 2205-9165 M +965 9472-0066 pphumpiu@worldbank.org	International Expert	Technical support to the Competition Policy Reform in Indonesia. To provide technical assistance in the development of competition policy reform report for Indonesia. The potential role of network-based competition and policies is explored in promoting long-term growth-enhancing sector linkages in Indonesia. Specifically, the report elaborates on the potential contribution to Indonesia’s growth prospect of market and competition policy (MCP) reforms in the “ <i>key service sectors</i> ”, including telecommunications, energy, and transportation.
February 9 – June 30, 2023	Ankara-Turkiye and Amsterdam-Netherlands	The World Bank 1818 H Street, NW Washington, DC 20433 USA Dr. Paul Phumpiu Chang T +965 2205-9165 M +965 9472-0066 pphumpiu@worldbank.org	International Expert	Technical support to World Bank Project “National and subnational assessment for competition policy to improve economic growth and the business environment of local markets (Business Environment and Private Sector Development, Competition Policy Program ID: P179724)” with the preparation of a report entitled “Characterizing supply network links of Saudi Arabia: The role of competition policy and productive capacities in economic diversification.”

<p>June 1, 2022 – July 30, 2023</p>	<p>Amsterdam, Netherlands; Tashkent, Uzbekistan</p>	<p>DT Global Idev Europe S.L., Building Iberia Mart I, Pedro Teixeira Street, nº 8, 4th 28020 Madrid, Spain</p> <p>Ms. Claudia Anton claudia.anton@dt-global.com Tel. (+34) 910962100</p>	<p>International Expert</p>	<p>Technical support to “EU assistance for Uzbekistan Agri-Food Development Strategy 2020-2030 Agriculture Support and Knowledge (ASK) facility.” The wider objectives of this assignment are to contribute to the implementation of priority reform actions in the agri-food sector, as defined in the Agriculture Development Strategy (2020-2030). The specific objectives are:</p> <ul style="list-style-type: none"> • To develop Draft Decree on FSN Strategy and Roadmap feedback and guidance. • To conduct FNS Information System Needs Assessment Study: (1) Describe the current state of the FSN ‘suite of indicators’; (2) Identify the gaps and needs for FSN data and information and data sources; (3) Design guidelines/protocols for regular compilation of FSN data from government offices (i.e., line ministries / relevant Dept. and other FSN stakeholders); (4) Develop a procedure for the new FSN Unit to update the FSN monitoring database. • To design and carry out data systems, programming, and quantitative analysis and capacity building: (1) Establish a running model of the FSN information and monitoring system; (2) Installation of Mathematica software to relevant computers and teaching the required programming; (3) Hands-on training to establish a model FSN information and monitoring system; (4) Introducing FSN early warning systems (AMIS, FAO policy analysis tools, FIVMS etc.); (5) On-line data compilation, database creation, conversion of the data compiled to Mathematica environment, developing Mathematica codes for quantitative FSN analysis and visual presentation of the results; • To design initial and future capacity-building program for the FNS Unit; and • To develop an FSN information bulletin.
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October 1, 2021- March 31, 2022	Amsterdam, Netherlands; Tashkent, Uzbekistan	DT Global Idev Europe S.L., Building Iberia Mart I, Pedro Teixeira Street, nº 8, 4 th 28020 Madrid, Spain Ms. Claudia Anton claudia.anton@dt- global.com Tel. (+34) 910962100	International Expert	<p>Technical support to “EU assistance for Uzbekistan Agri-Food Development Strategy 2020-2030 Agriculture Support and Knowledge (ASK) facility.”</p> <p>The wider objectives of this assignment are to contribute to the implementation of priority reform actions in the agri-food sector, as defined in the Agriculture Development Strategy (2020-2030).</p> <p>The specific objectives of this assignment are to:</p> <ul style="list-style-type: none"> • Conduct inventory and needs assessment for FNS data collection to inform short, medium and longer-term policy decision making • Development of a detailed roadmap for strengthening of existing FSN information system (including regular data collection and surveys) • Establish National FSN Information Platform to ensure effective monitoring, surveillance, coordination and consolidation across sectors as well as enhancing evidence-based policy information to guide related policy formulation and decision-making • Support and contribute to the implementation of the Strategy using relevant evidence-based analysis, strategic planning documents and related legal documents, as needed
June 6 – December 31, 2022	Amsterdam- Netherlands	Food and Agriculture Organization of the United Nations, Ankara, Turkey (FAOSEC) Mr. Keigo Obara (FAOSEC) Keigo.Obara@fao.org	Team Leader/ International Expert	<p>Under the overall supervision of FAO Sub-Regional Coordinator for Central Asia, support the ECO-RCC in finalizing “Regional Food Security Program of the ECO (RPFS)” and in drafting “Overview of Food Security in the ECO Region 2021.” Main duties are:</p> <ul style="list-style-type: none"> • To present the contents of the RPFS to the ECO-RCC and facilitate a better understanding of the proposed activities and rationale behind each activity; • To provide guidance to the ECO-RCC technical staff in presenting the RPFS to the member countries of ECO; • To draft a report on the overview of agri-food trade in ECO region as Part 2 in the Overview of Food Security in the ECO Region (OFS) 2021; • To conduct a half-day training on food security analysis for ECO-RCC staff; and • To participate in the ECO-RCC Steering Committee Meeting and other relevant events to support the consultation of the RPFS by ECO-RCC.

November 1- December 31, 2021	Amsterdam - Netherlands	Food and Agriculture Organization of the United Nations, Bangkok, Thailand (FAORAP) Mr. Aziz Elbehri (FAORAP) Aziz.Elbehri@fao.org	International Expert	Preparation of an assessment report on “ LDCs in Asia and the Pacific in relation to the Istanbul Plan of Action (IPoA). ” In preparation for the 5 th United Nations Conference on the Least Developed Countries, Doha, January 2022, an Issue paper has been prepared offering an in-depth policy analysis providing an evidence-based review of the progress made by the 12 LDC countries of Asia since the Istanbul Plan of Action was enacted a decade earlier. The Issue paper tackled structural transformation and development trends for the LDC countries over the course of 2005 to 2020 period and will focus on several priority areas highlighted in the IPoA, including: (i) productive capacity and diversification of production and exports; (ii) agriculture, food security, nutrition and rural development, (iii) trade and investments; (iv) gender and youth empowerment; (v) rebuilding resilience to climate change, disaster and to pandemics; and (vii) encouraging investment and capacity development. The paper will also place particular emphasis on the SDGs 1 (poverty), 2 (hunger) and 10 (inequality).
June 10 – August 31, 2021	Amsterdam - Netherlands	Food and Agriculture Organization of the United Nations, Bangkok, Thailand (FAORAP) Mr. Aziz Elbehri (FAORAP) Aziz.Elbehri@fao.org	International Expert	Preparation of an assessment report entitled “ COVID-19 and Food Systems: A regional review of macro-economic and food systems impacts and policy responses for Asia and the Pacific ”. FAORAP project “MPI.5.1. Ex-post COVID impact assessment (GF.RAPTE.RA 10101000000)”.
May 15 – December 30, 2020	Amsterdam- Netherlands	Food and Agriculture Organization of the United Nations, Ankara, Turkey (FAOSEC) Mr. Keigo Obara (FAOSEC) Keigo.Obara@fao.org	Team Leader/ International Expert	Regional Food Security Program (RFSP) development for the ECO region. International Expert for FAO of the United Nations. <ul style="list-style-type: none"> ▪ To provide technical assistance in the development of “ECO Regional Food Security Program (2021-2025)”; ▪ To provide technical assistance in the assessment of “Food Security in the ECO Region 2020”, including Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan.

March 14, 2019-June 30, 2020	Amsterdam-Netherlands	The World Bank 1818 H Street, NW Washington, DC 20433 USA Dr. Paul Phumpiu Chang T +965 2205-9165 M +965 9472-0066 pphumpiu@worldbank.org	Special Economic Adviser	Technical support to the Competition Policy Reform in Saudi Arabia. International Economic Adviser for the World Bank of the United Nations. <ul style="list-style-type: none"> ▪ To provide technical assistance in the development of a competition policy reform report for Saudi Arabia and other Middle East and North Africa (MENA) Countries; ▪ To develop a computable general equilibrium (CGE) model and an Input-Output model for Saudi Arabia to assess the impact of alternative competition policy interventions on the production system and welfare.
January 1, 2020-May 20, 2020	Amsterdam-Netherlands	COMCEC Prof. Dr. Serdar Sayan serdar.sayan@tepav.org.tr	Senior Expert	Technical support to the report “Good governance for ensuring food security and nutrition in the OIC Member Countries” by Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC, January 2020 – May 2020) <ul style="list-style-type: none"> ▪ To provide technical assistance in the assessment of food security governance in Members of the Organization of Islamic Countries;
January - March 2019	Amsterdam-Netherlands and Antalya - Turkey	Food and Agriculture Organization of the United Nations, Ankara, Turkey (FAOSEC) Mr. Keigo Obara (FAOSEC) Keigo.Obara@fao.org	Team Leader/ International Expert	Overview of Food Security in ECO Countries. International Expert for FAO of the United Nations (Project No: GCP/RER/044/TUR (ECO-RCC)). <ul style="list-style-type: none"> ▪ To provide technical assistance in the assessment of progress towards the Food and Nutrition Security Goals in Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan; ▪ To develop a food and nutrition security foresight towards 2030 and assess the progress in ECO Regional Food Security Programme (RFSP).
December 20, 2017 – March 9, 2018	Amsterdam-The Netherlands and Baku-Azerbaijan	Food and Agriculture Organization of the United Nations, Baku, Azerbaijan (FAOAZ) Ms. Melek Cakmak (FAOAZ) Melek.Cakmak@fao.org	Team Leader/ International Expert	Food Security Institutional Analysis – International Expert for FAO of the United Nations/FAOAZ/SEC Food Security Regular Program, Baku, Azerbaijan. <ul style="list-style-type: none"> ▪ To provide technical assistance in institutional development underpinning food and nutrition security policy and governance; ▪ To prepare a Food and Nutrition Security policy governance strategy document for the Ministry of Agriculture, the Government of Azerbaijan; ▪ To make recommendations for FAO technical assistance (capacity building) to the ministries (including Economy, Agriculture, Environment, Health, Social Protection); ▪ To inform the Ministry of Economy for the preparation of an Action Plan for the implementation of the FNS strategy, including an investment plan.

April 2016 – April 2020	EU and EU associated countries	<p>The James Hutton Institute, Invergowrie Dundee DD2 5DA Scotland</p> <p>SIMRA Coordinator Prof. Dr. Maria Nijnik Maria.Nijnik@hutton.ac.uk</p>	Social Innovation Think Tank Member	<p>Shaping Social Innovation for Marginalized Rural Areas (SIMRA). EU-funded Horizon 2020 Project (No: 677622 - RIA, Topic: ISIB-03-2015 - Unlocking the growth potential of rural areas through enhanced governance and social innovation, http://cordis.europa.eu/project/rcn/200385_en.html)</p> <ul style="list-style-type: none"> ▪ To conduct research and provide advice on social innovation strategies that will promote development in marginalized rural areas in Europe and the Mediterranean region (including non-EU); ▪ To produce prototype guidelines for the operationalization of the strategies across different regions, sectors (public and private) and at different levels (economy-wide versus regional); ▪ To develop strategies for private, public and market organizations to initiate collaborative innovations; ▪ To synthesize and disseminate new or improved knowledge of social innovations and novel governance mechanisms to promote social capital and institutional capacity building for shaping sustainable development trajectories;
May 2012- October 2020	Netherlands	<p>ECOREC Economics Research and Consulting, Amsterdam, Netherlands Dr. Tugrul Temel t.temel@ecorec.org</p>	Team leader	<p>Bayesian Estimation of a System of National Accounts: Implementation with Mathematica. Amsterdam, The Netherlands (www.ecorec.org).</p> <ul style="list-style-type: none"> • To develop a computerized system of UN national accounts to operationalize the use of UN SNA for conducting cross-country and within-country macroeconomic policy analysis.
May – September 2014	Azerbaijan	<p>Food and Agriculture Organization (FAO) of the United Nations, Baku, Azerbaijan</p> <p>Ms. Tarana Bashirova (FAOAZ) Tarana.Bashirova@fao.org</p>	Field Program Officer (Team Leader)	<p>Support to Strengthening of the Food Security Information System (FSIS) of Azerbaijan (project no: TCP/AZE/3501). Baku, Azerbaijan.</p> <ul style="list-style-type: none"> ▪ To provide technical assistance in institutional development aimed to support food and nutrition security information policy/system (FNSIS) of Azerbaijan; ▪ To prepare recommendations and a strategy document for promoting the development of FNSIS institutional structure, including information needs and gaps of the involved Ministries – Agriculture, Environment, Health and Social Protection; ▪ To design an action plan for FAO technical assistance in institutional capacity development in public and private organizations involved; ▪ To develop a proposal/plan for organizational change within the Ministry of Agriculture to create a dedicated department for food and nutrition security information management and a capacity building program for new staff to be hired; ▪ To prepare a strategy for the establishment of an FNS Evaluation and Monitoring Structure within the Ministry of Economy for cross-sector informed FNS policy making.

April – October 2014	Kyrgyzstan	<p>FAO of the United Nations, ESA, Rome, Italy</p> <p>Dr. Dorjee Kinlay Dorjee.Kinlay@fao.org</p>	Field Program Officer (Team Leader)	<p>Support to Strengthening of the Food Security Information System (FSIS) of Kyrgyzstan (project no: GCP/006/KYR/EC), Bishkek, Kyrgyzstan.</p> <ul style="list-style-type: none"> To provide technical assistance in capacity development in the Ministry of Agriculture of Kyrgyzstan for the preparation of a food and nutrition security strategy document, including action plan and an investment plan for the implementation of the strategy;
July-December 2014	Turkey	<p>EuroTrends Consulting 43, rue d'Aboukir - 75002 Paris France Tel: + 33 1 42 22 98 05</p> <p>Ms. Julien Monnery Project Manager julien@euro-trends.net</p>	Expert	<p>Ex-Post Evaluation of the Seventh Framework Program (FP7) in Turkey. EU Framework Contract Lot 7: Governance & Home Affairs (EuropeAid/127054/C/ SER/multi).</p> <ul style="list-style-type: none"> To evaluate the rationale, implementation and achievements of all specific programs and thematic levels of the 7th Framework Program in Turkey, including specific programs: (i) Cooperation: fostering collaboration between industry and academia to gain leadership in key technology areas; (ii) Ideas: supporting basic research at the scientific frontiers (implemented by the European Research Council); (iii) People: supporting mobility and career development for researchers both within and outside Europe; (iv) Capacities: helping develop the capacities that Europe needs to be a thriving knowledge-based economy; and (v) ERA-NETs (+), Joint Programming Initiatives (JPIs) and their Coordination and Support Actions (CSAs), Joint Research Centre (JRC), Joint Techn. Initiatives (JTIs), Articles 175/185. To prepare an assessment report reflecting on institutional development of Turkish Science, Technology and Innovation infrastructure, to identify areas that warrant further investment for the integration of the Turkish STI area into the European Research Area; To make recommendations for the Turkish STI policy and governance to consider for the participation in Horizon2020 program of the EU.
July – August 2012	Tajikistan	<p>Food and Agriculture Organization (FAO) of the United Nations, ESA, Rome, Italy</p> <p>Dr. Dorjee Kinlay Dorjee.Kinlay@fao.org Mr. Sanginboy Sanginov sanginboy.sanginov@fao.tj</p>	Field Program Officer (Team Leader)	<p>Support to Strengthening of the National Food Security Information System (FSIS) of Tajikistan (project no: GCP/TAJ/007/EC). Dushanbe, Tajikistan.</p> <ul style="list-style-type: none"> To provide technical assistance in institutional development aimed to support food and nutrition security information policy/system (FNSIS) of Tajikistan; To prepare recommendations and a strategy document for promoting the development of FNSIS institutional structure, including information needs and gaps of the involved Ministries – Agriculture, Environment, Health and Social Protection; To develop a proposal/plan for organizational change within the Ministry of Agriculture to create a dedicated department for food and nutrition security information management and a capacity building program for new staff to be hired; To prepare a strategy for the establishment of an FNS Evaluation and Monitoring Structure within the Ministry of Economy for cross-sector informed FNS policy making.

June 2005 – August 2006	Italy	FAO of the United Nations, ESA, Agricultural Development Economics Division, Rome, Italy Dr. Dorjee Kinlay Dorjee.Kinlay@fao.org	Research Scientist, Evaluator (Team Leader)	State of Food Insecurity 2006 (SOFI). Commissioned by FAO of the United Nations. <ul style="list-style-type: none"> To prepare background papers for assessing progress and setbacks in hunger reduction since 1990–92 at the global & regional levels; To review food security situation in each of the major developing regions & the transition countries; To derive lessons from experience in hunger reduction and make recommendations to accelerate progress for World Food Summit goal.
June 2005 – August 2006	Italy	FAO of the United Nations Dr. Dorjee Kinlay Dorjee.Kinlay@fao.org	Evaluator (Team Leader)	Mid-term progress in the implementation of the World Food Summit - Plan of Action. Commissioned by FAO. <ul style="list-style-type: none"> To evaluate mid-term progress in MDGs and developments in hunger reduction and food security over 1990-2003; To explore the factors for success in global hunger reduction – poverty; To make recommendations for enhancing global food security, hunger and poverty reduction;
2003 – 2005	Georgia	International Service for National Agricultural Research (ISNAR-CGIAR) Dr. Stein Bie steinbie@online.no	Team Leader	Information and communication technology (ICT) infrastructure and use in agricultural policy, research and development organizations: Georgia. Commissioned by FAO, Sustainable Development Division (REUS). <ul style="list-style-type: none"> To provide technical assistance in institutional development aimed to support ICT infrastructure and use in national agricultural research organizations (in the Ministry of Agriculture and Agricultural Academy of Sciences) in Georgia; To prepare recommendations to improve information management and use in agricultural policy, research and development organizations to enhance institutional and organizational research capacity, as well as to identify areas where public and private sector organizations can collaborate for joint use of available ICT infrastructure;
2008-2009	Kenya and Ethiopia	CORDAID The Hague, The Netherlands Mr. Gerard Schilderinck gerard.schilderinck@cordaid.nl	Researcher	Household and district level coping strategies against drought in Kenya. Funded by NGO CORDAID, The Netherlands. <ul style="list-style-type: none"> To conduct research and prepare a policy document aimed to monitor Drought Preparedness Program-1 (funded by <i>European</i> Civil Protection and Humanitarian Aid Operations (ECHO)) implemented in the Arid and Semi Arid regions of Northern Kenya and Southern Ethiopia; To design capacity building (i.e., training & support local programs) to enhance capacities of research teams; To develop a map of policies and coping strategies at different levels;

2002 - 2004	Central Asia and the Caucasus	International Service for National Agricultural Research (ISNAR-CGIAR) Dr. Stein Bie steinbie@online.no	Program Principal Scientist	Agricultural Innovation Systems (AIS) in Central Asia and the Caucasus. Funded by the CGIAR Finance Committee and the World Bank. <ul style="list-style-type: none"> ▪ To provide technical assistance in institutional development underpinning agricultural innovation system of Azerbaijan; ▪ To prepare an agricultural innovation policy/institutional assessment document (for the Ministry of Agriculture, the Government of Azerbaijan) to support the process of reforming the centrally managed public research system under the Agricultural Academy of Sciences; ▪ To identify research organizations for privatization, public-private partnerships, or ceasing the functionality to improve public research effectiveness and promote market oriented public-private ventures; to collaborate with the World Bank Competitive Grants system to promote market oriented private research projects;
January-February 2007	Horn of Africa, West & Southern Africa, Asia, Latin America	ECORYS Consulting Ms. Kim Groenewegen netherlands@ecorys.com	Expert (Team Leader)	Support to the identification, monitoring and evaluation of activities to be launched within the EU new thematic programme on food security. EuropeAid AIDCO 04 Food Security Sector Framework Contract funded by European Commission. <ul style="list-style-type: none"> • To elaborate, implement and evaluate programs to be launched within the new Thematic Program on Food Security; • To identify needs, activities, potential implementing partners-end users in research-technology, food security info systems and marginalized food insecure people in fragile countries.
December 2006	Amsterdam Netherlands	GRM International Ltd Ms. Suzanne Fogg Suzanne.fogg@grminternational.com	Expert	Agricultural Regeneration and Development Strategies for Afghanistan. Commissioned by the Ministry of Rural Rehabilitation and Development of Afghanistan and funded by UNDP. GRM International, United Kingdom. <ul style="list-style-type: none"> • To prepare methodologies for sector analysis, benchmark analysis and survey designs.
2001 - 2002	Azerbaijan	Int'l Service for National Agricultural Research (ISNAR-CGIAR); Dr. Stein Bie steinbie@online.no	Project Manager and Expert (Team Leader)	Agricultural development and malaria in Azerbaijan. Funded jointly by World Health Organization (WHO) and ISNAR. <ul style="list-style-type: none"> ▪ To provide technical assistance to the Ministry of Agriculture of Azerbaijan in institutional development aimed to control the malaria effects of agricultural production activities; ▪ To prepare cross-sectoral malaria control strategies for the Ministry of Agriculture, Ministry of Environment and the Ministry of Health to jointly target vulnerable groups;

2007	ACP countries	PROMAN Consulting Ms. Hilde Cornelissen hcornelissen@proman.nl	Evaluator	Assessment of proposals - ACP Science and Technology call for proposals. (EuropeAid Framework Contract 119860/C/SV/Multi LOT No. 9: Science & Technology). Funded by the EC. Belgium, Brussels. <ul style="list-style-type: none"> To evaluate 70 proposals on science-technology development in ACP countries.
2009-2012	Rwanda	Utrecht University Prof. Pieter Hooimeijer p.hooimeijer@uu.nl	Research Scientist	Population, reproductive health and economic development in Rwanda. Funded by Netherlands Organization for Scientific Research (NWO), WOTRO-Hewlett: PopDev program. The Hague, The Netherlands. <ul style="list-style-type: none"> To conduct research on the analysis and evaluation of the relationship between family size, human capital and growth using an AGE model, on the estimation of social accounting matrix multipliers to project marginal contribution to human capital investment and sectoral growth, on the analysis of trade-off between family size & households' investment in education and health of their children, drawing on an aggregate macroeconomic model of Rwanda.
2007 –2011	Rwanda	Development Research Institute Tilburg University Mr. Gerard de Groot G.A.deGroot@uvt.nl	Team Leader and Expert	Tailor-made training in “Modelling for Development Policy Making” in Rwanda. Funded by NUFFIC (2010). <ul style="list-style-type: none"> To provide technical assistance for lecturers/experts in the National University of Rwanda, National Statistics Institute & Ministry of Econ-Finance to use data systems in general equilibrium modelling; To enhance the use of systems of national accounts (SNA) and social accounting matrix (SAM) in quantitative general equilibrium modelling; To illustrate model calibration for scenario policy analysis in a typical CGE Model.
	Indonesia	Development Research Institute Tilburg University Mr. Gerard de Groot G.A.deGroot@uvt.nl	Project Coordinator and Expert (Team Leader)	Tailor-made training in “Research Methodology, Proposal Writing, Reporting and Publication” in Indonesia (NFD/IDN/08/19). Funded by NUFFIC (2009). <ul style="list-style-type: none"> To organize capacity building programs for lecturers in the State University of Papua in Indonesia; To provide guidance in the design of project management and research cycle, in the development of research proposals/projects, in the presentation of research findings in international conventions.
	Rwanda	Development Research Institute Tilburg University Mr. Gerard de Groot G.A.deGroot@uvt.nl	Team Leader and Expert	Tailor-made training in “Quantitative Methods for Policy Analysis” in Rwanda. Funded by NUFFIC (2009). <ul style="list-style-type: none"> To provide technical assistance on data systems and their use in policy analysis; To organize capacity building programs: (1) introducing to the systems of national accounts (SNA); (2) reshaping the SNA as a social accounting matrix and an Input-Output matrix; (3) illustrating the use of these data frameworks in the analysis of specific policy issues; and (4) introducing analytical and quantitative tools, including a typical CGE Model, Bayesian estimation, path analysis, applications with Mathematica software.

2007-2012	Rwanda	<p>Development Research Institute, Tilburg University</p> <p>Mr. Gerard de Groot G.A.deGroot@uvt.nl</p>	<p>Project Manager and Expert (Team Leader)</p>	<p>Capacity building in education and research in applied statistics at the National University of Rwanda (NUR). Funded by Netherlands Organization for International Cooperation in Higher Education. The Hague, The Netherlands.</p> <ul style="list-style-type: none"> ▪ To provide technical assistance to the National University of Rwanda in establishing an Applied Statistics Department with a Library/a computer lab and developing statistics teaching/research curriculum for the Department with linkages to the National Statistics Institute (INI) of the Government of Rwanda; ▪ To conduct institutional capacity development programs to train potential lecturers/experts in Applied Statistics, official national economic and agricultural accounts experts associated with INI, the Ministry of Agriculture and the Ministry of Economy and Finance; ▪ To provide support for the adjustment of national economic data frameworks to UN SNA framework and the use of SNA in informed policy making to better respond to market developments; ▪ To develop a strategy and provide technical assistance to the National Statistics Office, the Ministry of Agriculture, Ministry of Economy and Finance, and the National University of Rwanda to promote the actual use of survey, census & national accounts data for policy-decision making & impact assessment.
2007-2011	Angola	<p>Development Research Institute, Tilburg University</p> <p>Mr. Gerard de Groot G.A.deGroot@uvt.nl</p>	<p>Project Manager and Expert (Team Leader)</p>	<p>Macro-accounting for policy analysis in Angola. Funded by the World Bank and National Statistic Institute of Angola, Washington D.C., USA.</p> <ul style="list-style-type: none"> • To provide technical assistance to National Statistics Office (INE) in developing Angola's System of National Accounts (UN SNA 1993) and in using survey, census and national accounts data for policy-decision making and policy impact assessment; • To provide support for the adjustment of national economic data frameworks to UN SNA framework and the use of SNA in informed policy making to better respond to market developments; • To conduct training programs for SNA experts/staff in designing SNA framework & classifications, benchmark compilation, annual compilation; to conduct on-the-job training, including compilation framework designed for Angola, SNA compilation methodology, Bayesian estimation methodology;

2003 –2007	Tanzania	International Service for National Agricultural Research (ISNAR-CGIAR) Dr. Stein Bie steinbie@online.no	Team Leader and Expert	Impact of land use and agricultural practices on malaria burden in Mvomero district - Tanzania. Commissioned by CGIAR-System-wide Initiative on Malaria and Agriculture (SIMA) and International Development Research Center (IDRC). <ul style="list-style-type: none"> To investigate the linkages between agriculture & spread of malaria in the Mvomero district; To inform government & local decision makers on favourable agricultural-social practices; To develop a priority-setting method in a multi-sector system; to illustrate its application in malaria research in Tanzania, drawing on the findings of a workshop held in Dar es Salaam.
2004	Turkey, European Union	Wageningen University Agricultural Policy Group Prof. Arie Oskam (retired)	Expert	Turkey in the European Union: Consequences for agriculture, food, rural areas and structural policy. Funded by the Dutch Ministry of Agriculture, Nature and Food Quality. <ul style="list-style-type: none"> To provide technical assistance in the assessment of Turkish agricultural institutions with a view to adjusting them to the Acquis Comunitaire (European Constitution); To identify critical reform areas to improve competition, market developments, intellectual property rights, and science-technology institutions;
1998 - 2001	Burkina Faso, Cote d'Ivoire, Ghana, Mali, Togo	Center for World Food Studies, Free University of Amsterdam Prof. Michiel Keyzer keyzer@sow.econ.vu.nl	Project Manager (Team Leader)	Human Resource Development: Burkina Faso, Cote d'Ivoire, Ghana, Mali, and Togo. Funded by Research Network for Sustainable Food Security in Central West Africa (SADAOC). <ul style="list-style-type: none"> To conduct hands-on training & capacity building activities for researchers from the countries of interest to master applied general equilibrium modelling & econometric methods; To lecture on project design, fund raising methods, developing research proposals for funding.
1998	Sub-Saharan Africa	Center for World Food Studies, Free University of Amsterdam Prof. Michiel Keyzer keyzer@sow.econ.vu.nl	Project Manager (Team Leader)	Agro-ecological Conditions in Africa. Funded by African Econ. Research Consortium. <ul style="list-style-type: none"> To investigate factors behind poverty/food insecurity in sub-saharan Africa using agro-ecological zones methodology; To map agro-ecological zones in Africa to target commodities for food security.
1997 - 2001	Lebanon, Armenia, Azerbaijan, Georgia, Kyrgyz Republic	Center for World Food Studies, Free University of Amsterdam Prof. Michiel Keyzer keyzer@sow.econ.vu.nl	Research Scientist and Evaluator (Team Leader)	Rural Poverty Assessment and Mapping in Lebanon. Funded by International Fund for Agricultural Development (IFAD). // Rural Poverty Assessment in the Caucasus Countries. Funded by IFAD. // Food Security Network. Funded by European Union. <ul style="list-style-type: none"> To conduct survey to collect data at the household level, and integrate it into national census to characterize the poor and map poverty using GIS methodology; To apply non-parametric estimation methods to explore the factors behind poverty.

1999 - 2000	Ethiopia	Center for World Food Studies, Free University of Amsterdam Prof. Michiel Keyzer keyzer@sow.econ.vu.nl	Project Supervisor	WTO, Agriculture & Developing Countries: Ethiopia. Funded by FAO. <ul style="list-style-type: none"> ▪ To provide technical assistance in institutional - trade capacity development of Ethiopia; ▪ To prepare a strategy document for further strengthening and reforming for Ethiopia to function adequately in WTO matters; ▪ To make recommendations to release agricultural supply constraints in Ethiopia.
1997 - 1999	Nigeria	Center for World Food Studies, Prof. Michiel Keyzer keyzer@sow.econ.vu.nl	Project Leader (Team Leader)	The Impact of Climate Change in Nigeria. Funded by FAO. <ul style="list-style-type: none"> • To develop applied general equilibrium models incorporating the impact of climate change; • To inform Nigerian policy makers for the design of environmental-economic policies.
1996 - 2000	European Union	Center for World Food Studies, Free University of Amsterdam Prof. Michiel Keyzer keyzer@sow.econ.vu.nl	Project Leader (Team Leader)	Future of European Agriculture Reform of the Common Agricultural Policy after 2000. Funded jointly by Netherlands Bureau for Economic Policy Analysis (CPB), Agricultural Economics Research Institute (LEI-DLO) and SOW-VU. <ul style="list-style-type: none"> • To conduct scenario analysis using applied general equilibrium models; • To make recommendations to Dutch policy makers for dialogues in EU communications.
1995 –1997	New Jersey, USA	Rutgers University Prof. Edmund Tavernier	Post-Doc. Ag. Economics	<ul style="list-style-type: none"> • To conduct policy research on labour markets, farming, land tenure, farmland utilization, land valuation in US agriculture; • To lecture on land use, labour markets in US agriculture and in econometric methods.
1993 - 1994	Ghana	University of Minnesota Dept of Applied Economics Prof. Terry Roe troe@apec.umn.edu	Research Scientists and Expert	Monograph: Adjustment, Agricultural Marketing, Environment in Ghana. Funded by USAID. <ul style="list-style-type: none"> ▪ To provide technical assistance in structural adjustment policy development to explore the adverse effects of structural policies on agricultural marketing and the environmental degradation in Ghana; ▪ To prepare recommendations to incorporate the environment into adjustment policies; ▪ To propose potential institutional reforms to address the cross-sector issues in the agriculture, marketing and environment in Ghana.
1991	Washington USA	IMF, Treasurer’s Department Dr. Michael Papaianou;	Economist	Assessment of the role of IMF Special Drawing Rights in portfolio management <ul style="list-style-type: none"> • To carry out research on the performance of SDR in the global monetary/financial system.
1986 –1991	Ankara, Turkey	Central Bank of Turkey, Director Research Dept, Dr. Hasan Ersel	Economist	<ul style="list-style-type: none"> • To conduct research on monitoring private banks, monetary-exchange rate policies, trade policies; • To develop methods for evaluating bank performance and country export competitiveness.

Other relevant information

Journal Publications (Selected)

- Temel, T., Phumpiu, P. (2021). Pathways to recovery from COVID-19: characterizing input–output linkages of a targeted sector. *Journal of Economic Structures* **10**, 29. <https://doi.org/10.1186/s40008-021-00256-2>
- Temel, T., and Karimov, F. (2019). Information Systems Model for Targeting Policies: A Graph-Theoretic Analysis of Expert Knowledge with an Application to Food and Nutrition Security Information System of Azerbaijan. *Expert Systems with Applications* **119**, 400-414.
- Temel, T. (2016). A methodology for characterizing innovation systems – Revisiting the agricultural innovation system of Azerbaijan. *Int'l Journal of Transitions and Innovation Systems*, 5(3/4), 254-298.
- Temel, T and Kinlay, D. (2014). A method for assessing food security information system. *Int'l Journal of Information Systems and Management*, 1(1/2), 166-194.
- Temel, T. (2014). Family planning, growth and income distribution in Rwanda: SAM multiplier and graph-theoretic path analysis. *Journal of Economic Development*, 39(1), 1-56.
- Temel, T. (2013). Family size, human capital and growth: structural path analysis of Rwanda. *Journal of Economic Development*, 38(4), 39-73.
- Temel, T. (2007). Institutional change in innovation systems. *Editorial to the Special Issue 2007, Int'l Journal of Agricultural Resources, Governance and Ecology*, 6(2), 141-143.
- Temel, T. (2007). A conceptual framework for managing information flow in innovation systems. *Special Issue 2007, Int'l Journal of Agr. Resources, Governance and Ecology*, 6(2), 179-193.
- Temel, T. (2006). Systems information management: graph-theoretical approach. *Int'l Journal of Computer Applications in Technology*, 25(1), 15-21.
- Temel, T., Lucas, A. (2005). Technical efficiency of Georgian farms after independence. *Int'l Journal of Applied Econometrics & Quantitative Studies*, 2(1).
- Temel, T., Tansel, A., Gungor, D. N. (2005). Convergence of sectoral productivity in Turkish provinces: Markov Chains model. *Int'l Journal of Applied Econometrics & Quantitative Studies*, 2(2).
- Temel, T. (2005). A systems approach to malaria control: an institutional perspective. *Health Policy*, 71(2), 161-180.
- Temel, T. (2004). A method for cross-sector priority setting: gaps and hypotheses in malaria research - Tanzania. *European Journal of Health Economics*, 5(4), 317-323.
- Temel, T. (2004). Mapping organizational linkages in the agricultural innovation system of Azerbaijan. *Int'l J of Agr. Resources, Governance, and Ecology*, 3(1/2), 134-153.
- Temel, T. (2004). A cross-sector priority setting method: critical gaps in malaria research in Tanzania. *ISNAR Briefing Paper No. 75*.
- Temel, T. (2004). A method for linkage analysis. *Int'l Journal of Computer Applications in Technology*, 20(4), 188-192.
- Temel, T. (2004). Malaria from the gap: Azerbaijan. *Acta Tropica*, 89(2), 249-259.
- Temel, T., Janssen, W., Karimov, F. (2003). Systems analysis by graph-theoretic techniques: Assessment of the agr. innovations system of Azerbaijan. *Agricultural Systems*, 77(2), 91-116.
- Temel, T. (2000). US farm wages & labor market efficiency. *Growth and Change*, 31(3), 420-437.

Books, Editorial and Book Chapters (Selected)

- Temel, T. (2014). *Information and Innovation Systems Analysis: An Actor-Based Approach*. (Forthcoming).
- Temel, T. (2007). *Institutional Change in Innovation Systems*. Guest Editor to Special Issue 2007 of the Int'l Journal of Agriculture, Resources, Governance and Ecology. www.ecorec.org/publications/B006.pdf
- Temel, T. (2005). Chapter 3: The institutional framework of Turkey and Turkish agriculture. In A. Burrell and A. Oskam (Eds.), *Turkey in the EU*. Netherlands: CABI Press. www.ecorec.org/publications/B005.pdf
- Temel, T. (2005). Chapter 12: Expected consequences for Turkey of EU entry in 2015. In A. Burrell and A. Oskam (Eds.), *Turkey in the EU*. Netherlands: CABI Press. www.ecorec.org/publications/B004.pdf

Working Papers and Country Reports (Selected)

- Temel, T and Phumpiu, P. (2023). Policy design from a network perspective: targeting a sector, cascade of links, network resilience. ECOREC Working Paper No. 23-01. Amsterdam, The Netherlands. (MPRA Paper No. 118466 - <https://mpra.ub.uni-muenchen.de/118466/>)

- Temel, T. (December 2021). *Progress in the LDCs in the Asia-Pacific region in relation to the Istanbul Plan of Action (2011-2020)*. Bangkok, FAO. <https://www.un-ilibrary.org/content/books/9789216040598c006>
- Temel, T. 2022. *2020 Overview of Food Security in Economic Cooperation Organization Member States*. Prepared for FAO and ECORCCFS. Ankara. <https://doi.org/10.4060/cb9551en>
- Temel, T. (November 2022). *Food and nutrition security data needs assessment: Uzbekistan*. Prepared for EU ASK Facility, Implementing Partners for the Uzbek Agri-food Development Strategy (2020-2030). Tashkent, Uzbekistan.
- Elbehri, A., Temel, T., Burcu Ceylan, F., Mittal, S., Kularatne, D. and Dawe, D. 2022. *COVID-19 pandemic impacts on Asia and the Pacific – A regional review of socioeconomic, agrifood and nutrition impacts and policy responses*. Bangkok, FAO. <https://doi.org/10.4060/cb8594en>
- Temel, T. (2013). Targeting information policy for improved system performance. ECOREC Working Paper No. 13-02. Amsterdam, The Netherlands. (MPRA No. 44303 - <http://mpra.ub.uni-muenchen.de/44303/>)
- Temel, T., Kinlay, D. (2012). A methodology for information system formation and performance. ECOREC Working Paper No. 12-09. Amsterdam, The Netherlands. (MPRA No. 42263 - <http://mpra.ub.uni-muenchen.de/42263/>)
- Temel, T. (2012). An assessment of food security information system in Tajikistan. ECOREC Working Paper No. 12-08. Submitted to FAO of the United Nations, Dushanbe, Tajikistan.
- Temel, T. (2007). Data compilation methods: Application with *Mathematica*. IVO Working Paper: 07-01. Tilburg Univ. www.ecorec.org/publications/W035.pdf
- Tavernier, M. E., Temel, T., and Li, F. (2007). Formation of offer prices in farmland markets: a hedonic price approach (with Edmund M. Tavernier and Farong Li). Rutgers University, Department of Agricultural, Food and Resource Economics. New Brunswick, NJ, USA.
- Temel, T. (2006). Mid-term review of achieving the World Food Summit hunger target. The 32nd Session of the Committee on World Food Security, CFS Document 2006/3. Rome, Italy: FAO of the UN. www.ecorec.org/publications/W032.pdf and <ftp://ftp.fao.org/unfao/bodies/cfs/cfs32e.doc>
- Temel, T. (2006). Factors behind success in hunger reduction: 1990-2002. Background Paper to SOFI (2006). Rome, Italy: FAO of United Nations. www.ecorec.org/publications/W031.pdf
- Temel, T. (2006). A review of progress in hunger reduction – 1990/2003: lessons, challenges and the way forward. Background Paper to SOFI (2006). Rome, Italy: FAO.
- State of the Food Insecurity 2006 (SOFI). Rome, Italy: FOA of the United Nations. <ftp://ftp.fao.org/docrep/fao/009/a0750e/a0750e00.pdf>
- Turkey in the European Union: Consequences for agriculture, food, rural areas and structural policy (with Arie Oskam, Alison Burrell, Siemen Berkum, Natasha Longworth and Irene Molina). Commissioned by the Dutch Ministry of Agriculture, Nature and Food Quality and conducted by Agricultural Economics & Rural Policy Group, Wageningen University.
- Information and communication technology infrastructure and use in agriculture - Agricultural policy, research & education organizations in Georgia (with Ajit Maru). The Hague: FAO and ISNAR, 2003. www.isnar.cgiar.org/pdf/georgia_ict.pdf
- Temel, T., and Maru, A. (2002). A conceptual framework for studying linkages in an agriculture, health, and environment system. ISNAR Discussion Paper 02-6.
- Temel, T., and Ejov, M. (2001). Agricultural development and its impact on malaria: Azerbaijan. ISNAR Discussion Paper 1-11. www.isnar.cgiar.org/activities/pdf/Malaria-Azerbaijan.pdf
- Temel, T. (2000). A non-parametric hypothesis test via the bootstrap re-sampling. SOW-VU Staff WP-00-03. www.isnar.cgiar.org/pdf/discuss/Boot.pdf
- Temel, T., and Albersen, P. (2000). New facts for an old debate: Farm size, productivity & geography. SOW-VU Staff WP-00-02. www.isnar.cgiar.org/pdf/discuss/FsizeUSA.pdf
- Temel, T., and Roe, L. T. (1998). Industrial policy, collective action, the direction of technological change. SOW-VU Staff WP-98-08. www.isnar.cgiar.org/pdf/discuss/IndustryPolicy.pdf
- Rural Poverty Assessment and Mapping in Lebanon (with Michiel A. Keyzer, Wim C.M. van Veen, Peter J. Albersen, Martin Nube, Benjamin G.J.S. Sonneveld, Bart G.J.M. van den Boom, and Geert B. Overbosch, in collaboration with MAA-DATA, Statistical Consulting Centre, Beirut, Lebanon). ISBN 90-805572-1-8 and ISBN 90-805572-2-6. SOW-VU, 2000.
- Rural Poverty Study of the Caucasus Countries: Summary of Findings (with Michiel A. Keyzer, Geert B. O, Martin N, in collaboration with Ministry of Agriculture of Armenia, Azspetsprominvest Consulting and Engineering Company Azerbaijan, and International Centre for Reformation and Development of Georgian Economy). SOW-VU, 1998.

- Monograph: Adjustment, Agricultural Marketing, and Environment: The Case of Ghana (with Terry L. Roe). USAID Project No. DHR-5555-Q-00-1087-00, 1994.

Graduate and undergraduate courses/lectures (Selected)

- Applied Modelling for Policy Analysis - Applications with Mathematica: A 2-week tailor-made training program for lecturers from Applied Statistics Dept at National University of Rwanda, statisticians from the National Institute of Statistics of Rwanda and experts from the Ministry of Economy and Finance of Rwanda. Butare, Rwanda: May 28-July 12, 2010.
- Quantitative Methods for Policy Analysis - Applications with Mathematica: A 2-week tailor-made training program for lecturers from the Department of Applied Statistics at National University of Rwanda. Butare, Rwanda: September 24 – October 8, 2009.
- Introduction to Policy Analysis: A 2-week tailor-made training program for lecturers from the Department of Applied Statistics at National University of Rwanda. IVO, Tilburg University, Tilburg, The Netherlands: February 9-20, 2009.
- Research Methodology, Proposal Writing, Reporting and Publication: A 4-week tailor-made training program for lecturers from various departments at the State University of Papua, Indonesia. IVO, Tilburg University, Tilburg, The Netherlands: June 1-30, 2009.
- Institutions, Innovations and Growth: Mansholt Graduate School of Social Sciences, Wageningen University, Wageningen, The Netherlands: May 2005. www.sls.wau.nl/mi/mgs/courses/index.htm
- Intermediary Macroeconomics (EC2FT03) and Stock Market (IC2AFT03), School of Economics, Inholland University, Amsterdam, The Netherlands, 2004.
- Introduction to Macroeconomics (Econ 101) and Money and Banking (Econ 3073): Department of Economics, University of Minnesota, Minneapolis, USA, 1992.
- Portfolio Management Lecture: Applied Econometrics in Agricultural Economics (AgEcon 415), Dept of Agr. Economics & Marketing, Rutgers University, New Jersey, USA, 1995.
- Endogenous Technological Change Lecture: Economic Development Center, Dept of Applied Economics, University of Minnesota. St. Paul, Minnesota, USA, 1995.