

# **Center for Global Trade Analysis**

Strategic Plan - Long-Range

2008 - 2014

October 26, 2004

# THE CENTER FOR GLOBAL TRADE ANALYSIS STRATEGIC PLAN October 2004

#### **OUR MISSION**

The Center for Global Trade Analysis is the publicly funded, university-based home for GTAP (Global Trade Analysis Project), a global network of researchers and policy makers conducting quantitative analysis of international policy issues. Our purpose is to improve the quality of global economy-wide analysis through education and by developing analytical data bases, economic models, and innovative methodologies. Our unique institutional structure enables us to foster collaboration among academia, public sector, and private sectors worldwide.

#### OUR CORE VALUES AND BELIEFS

#### We value:

- o *International Collaboration* because it increases quality of data and analysis.
- o *Objectivity and transparency* because they are crucial to our data work and analysis.
- o *Discovery* because improving methodology leads to better policy analysis.
- o *Learning* because it creates critical vibrancy both within the Center and in the expanding network.
- o *Engagement* because it helps us serve policy analysts and decision makers with better data and analysis.

#### We believe that:

- o Better data leads to better policy analysis which leads to better policy.
- o Reconciling data makes data better.
- o CGE modeling provides useful insights.
- o Avoiding duplication in data production is efficient.
- o Collaboration enhances individual efforts.
- Having more trained users enriches policy debates.

#### **OUR VISION OF THE FUTURE**

In 2014, GTAP is an exceptionally vibrant network of global economic policy analysts, with more than 10,000 individuals in 150 countries making contributions. The GTAP Data Base and models are used in research centers throughout the world, leading to ever greater transparency in global economic analysis.

GTAP-based results are influential among decision makers. After 10 years of intensive model validation efforts, GTAP-based models are widely accepted in the professional literature. Indeed, editors of leading journals actively seek out GTAP-based papers on contemporary policy issues.

The GTAP Data Base remains at the core of the Center. The open-source institutional arrangement by which the data base is now assembled has spawned rapid growth, with active collaboration in more than 100 countries. It is now possible for national agencies in any one of those countries to scrutinize key assumptions, rebuild the data base, and propose modifications to the official GTAP Data Base. Half of our courses are now conducted in developing countries. The 50 consortium members meet regularly through teleconferences to contribute ideas and to help keep the Center's efforts focused on our vision.

### CENTER FOR GLOBAL TRADE ANALYSIS STRATEGIC PLAN

The Center for Global Trade Analysis is the publicly funded, university-based home for GTAP (Global Trade Analysis Project), a global network of researchers and policy makers conducting quantitative analysis of international policy issues. Our purpose is to improve the quality of global economy-wide analysis through education and by developing analytical data bases, economic models, and innovative methodologies. Our unique institutional structure enables us to foster collaboration among academia, public sector, and private sectors worldwide.

### Research Actively participate in quantitative economic analysis of

Multilateral

and bilateral

agreements

• Trade and

development

environmental

Global

issues

trade

# pressing global concerns

#### Improve data product quality, service. procurement, development. scope, distribution, and marketing

Data

Improve

data

products

### Education

Expand and improve global economic analysis education worldwide

#### Model

**Improve** understanding and credibility of the GTAPbased models

#### Network

Increase effective participation in global network, particularly in developing countries

- Promote learning among data base contributors
  - Develop specialized learning methods
  - Improve knowledge transfer in the Center
  - Improve marketing
- Enhance validation testing and evaluation of the GTAP-based models.
- Further enhance the ability of users to understand and explain model results
- Increase developing country participation
- Improve communication in the user community

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#### SUMMARY OF THE CENTER GOALS AND SUPPORTING STRATEGIES:

To achieve our vision, we are working toward the future with five goals.

# Research Goal: To actively participate in quantitative economic analysis of pressing global concerns.

#### Data Goal: To improve data products.

- 1. Improve data quality and user service.
- 2. Improve data procurement.
- 3. Improve data development efficiency and quality by distributing data construction program.
- 4. Expand scope of data base.
- 5. Improve marketing of data base.

# **Education Goal:** To expand and improve global economic analysis education worldwide (both within and outside the network).

- 1. Promote learning among data base contributors.
- 2. Use workshops and web-based products to provide specialized learning.
- 3. Improve communication, learning, and transfer of knowledge within the Center.
- 4. Improve marketing of GTAP courses.

# **Model Goal:** To improve understanding and credibility of the GTAP-based models.

- 1. Enhance testing and evaluation of the GTAP-based models.
- 2. Further enhance the ability of users to understand and explain model results (long-range).

# **Network Goal:** To increase effective participation in the global network, particularly in developing countries.

- 2. Conduct more courses and conferences in developing countries.
- 4. Foster communication within the GTAP network and beyond.



### Center for Global Trade Analysis Strategic Plan - Long-Range 2007 - 2014

**PATH TOWARD THE FUTURE:** The Center's long-range goals are detailed with strategies to achieve each goal, and associated Action Plans (Objective, Timeline, Resources and Metrics)

### Data Goal: To improve data products

#### 1. Improve data quality and user service

Action Plans: Objective	Timeline	Resources	Metrics
1.1 Develop and apply data comparison programs for the final data base and for	Starting 2006, annually	BD, RM	Comparison program developed and applied for global data
intermediate datasets (Data comparison programs are useful to illustrate changes	amuany		Comparison programs applied to 1 large or 2 small modules annually
in the data between releases and to discover data errors)			Applied to new modules 1 year after integration
			Report and standards document produced
	2014	BD, RM	Completed for half of data construction process
1.2 Shorten gap between data release, published documentation and webbased ancillary	Starting 2004	BD, RM, JC	Published GTAP 6.0 Data Base documentation released at the same time as public release
documentation			Ancillary web-based documentation completed 6 months after published documentation
1.4 Identify and create ad hoc expert groups for different data base aspects	Starting 2004, annually	BD, RM	With help from outside experts, an activity report created on at least 1 aspect of data base, beginning with protection

## Data Goal (continued)

Action Plans: Objective	Timeline	Resources	Metrics
1.5 Critically review and revise methods for filling in missing data	Starting 2005, annually	BD, RM	Methods for filling in missing data applied to 1 large or 2 small modules a year
			Methods for filling in missing data applied to new modules 1 year after integration
			Documentation produced for each module completed
	2014		Half of data construction process completed
<ul> <li>1.6 Regularly review data release policies (e.g., frequency of data releases; contents of data package; terms and conditions for general customers; consortium member privileges)</li> <li>2. Improve data procurement</li> </ul>	Starting 2006, every 2 years	WT, RM, BD, JC	Report or revised strategy completed
2.1 Improve evaluation of incoming data	Starting 2004	BD, RM, TW	Method for evaluating incoming data improved and implemented
			Report covering internal consistency and relevant comparisons for each incoming dataset (both I-O tables and international datasets) produced
2.2 Review quality of existing I-O tables and identify needed I-O tables	Starting 2005, every 2 years	BD, RM, TW	I-O table contributions actively pursued by identifying best and potentially most reliable contributors
2.3 Establish relationships with potential contributors of non-I-O data	Starting 2005, every 2 years	BD, RM, TW	Non-I-O data set report produced at regular intervals, first FAO and later others as opportunities arise

# Data Goal (continued)

Action Plans: Objective	Timeline	Resources	Metrics
2.4 Regularly review data procurement policies (e.g., terms and conditions for data contributors, IPR concerns)	Starting 2006, every 2 years	BD, RM	Data procurement policy report produced and updated
3. Improve data development ef	ficiency and	quality by dist	tributing data construction program
3.4 Distribute selected modules from the data construction program	2008	BD, RM	Selected modules (initial I-O cleaning module and final assembly module) make available on the GTAP website
4. Expand scope of data base			
4.3 Integrate external and government accounts	2008	BD, RM	Integrated external and government accounts in data base
4.4 Include model-driven data innovations (such as GTAP-E, domestic margins)		BD, RM	Integrated within 2 years of full-fledged model completion
4.6 Universal country coverage	2009	BD, RM	Universal country coverage implemented
4.7 Include model-driven data innovations (such as GTAP-E, domestic margins)	2010	BD, RM	Integrated within 2 years of full-fledged model completion
5. Improve marketing of data b	ase		
5.3 Present (or publish) papers that highlight the GTAP Data Base in non-GTAP conferences (journals)	Starting 2005, annually	BD, RM	One paper presented or published annually
5.4 Coordinate with governments or professional associations of selected target countries to promote the GTAP Data Base	Starting 2005, every 2 years	BD, RM	A new target country identified, pursued, and contacted

# **Education Goal:** To expand and improve global economic analysis education worldwide globally (both within and outside network)

### 1. Promote learning among data base contributors

Action Plans: Objective	Timeline	Resources	Metrics
1.1 Hold workshops to assist I- O contributors (either along with Annual Conference or	2008	TW, BD, RM	GTAP I-O workshop held within 1 year of course
regional Short Course, or according to available funding)			Fifty percent of attendees successfully contribute an I-O table to the GTAP Data Base
1.3 Hold workshop on data base construction	2009	BD, RM	Data base construction workshop conducted
			Ten paying participants for the first workshop secured

### 2. Use workshops and web-based products to provide specialized learning

2.2 Hold specialized workshops in advanced modeling topics, in conjunction with conferences	2014	HL, TH	Three workshops held
2.4 Develop Technical Papers to offer training in specialized areas	2008	MB	Two additional modules completed
2.6 Hold a GTAP with GAMS course	2009		GTAP with GAMS course held
			Two Center staffers to have developed GTAP in GAMS skills &/or new staff member with
			GAMS skills

### **Education Goal** (continued)

### 3. Improve communication, learning and transfer of knowledge within the Center

Action Plans: Objective	Timeline	Resources	Metrics
3.2 Hold technical workshop to get new graduate students up-to-speed	Sept. 2005, annually	TW, HL, JC	Technical workshop/training session held for new students
			In yearly feedback reviews, positive graduate student feedback obtained
3.3 Create systematic mentoring program	Sept. 2004, annually	TW, graduate students	Each graduate student assigned a student or Center staff mentor
			In yearly feedback reviews, positive graduate student feedback received
3.4 Proactively assist graduate students with career development	June 2006, annually	TW, TH, graduate students	At least 1 student completed a short- term project, possibly with a consortium member
3.5 Systematically document programs, best practices, procedures, etc.	2009	GM, BD, JC	Documentation of (1) web site features, (2) data base construction procedures, and (3) Center's workings with the department/university
3.6 Offer GTAP staff training (self-study or review courses) in econometrics, GAMS, programming languages	Starting 2004, annually	BD, RM, TW, HL	At least one person on GTAP staff completes self-study or review courses in econometrics, GAMS, and/or programming language
3.7 GTAP staff attend professional workshops/conference (other than GTAP)	Starting 2005, every 2 years	BD, RM, HL	At least 1 Center staffer attended workshop or (non-environmental) professional conference

### **Education Goal** (continued)

Action Plans: Objective	Timeline	Resources	Metrics
3.8 Participate in international environmental conferences and workshops (e.g., Energy Modeling Forum)	2005, annually	HL, TH, RM, TW	At least 1 Center staffer participates in an international environmental conference or workshop
4. Improve marketing of GTAP	courses		
4.1 Increased use of Internet and e-mail discussion groups to advertise courses	Starting July 2004	JC, GM	All courses and conferences advertised on appropriate web sites and discussion lists

# Model Goal: To improve understanding and credibility of GTAP-based models

### 1. Enhance validation of the GTAP models

Action Plans: Objective	Timeline	Resources	Metrics
1.2 Promote wider use of GTAP-based models in academia	June 2009	GM, TH	Number of GTAP-based papers published in refereed journals increases by 50 percent
1.6 Synthesize econometric studies of key elasticities for the GTAP model	2009	TH, new faculty member	One technical paper on the web

### 2. Further enhance the ability of users to understand and explain model results

2.1 Develop additional tools for	2009	TH, RM,	One additional software tool to help
understanding,		TW	analyze results available on the web
decomposition and			and used in short course
explanation of model			
results			

# **Network Goal:** To increase effective participation in the global network, particularly in developing countries

### 2. Conduct more courses and conferences in developing countries

Action Plans: Objective	Timeline	Resources	Metrics
2.1 Hold periodic conferences in developing countries	2007	WT,TW, TH	First conference held in developing country
2.2 Hold courses aimed at developing countries	2009	JC, TW, TH, GM, graduate students	One third of course participants from developing country

### 4. Foster communication and learning within the GTAP network and beyond

4.3 Produce GTAP-L	Aug. 2004,	JC, BD	GTAP-L Newsletters sent to
Newsletters	twice	GM	network every 6 months
	annually		