

CONTENTS

PREFACE	xi
ACKNOWLEDGEMENTS	xv
EXECUTIVE SUMMARY	1
I INTRODUCTION AND BACKGROUND	5
I.1 Background to the Handbook	5
I.1.1 Why is the Handbook being produced?.....	5
I.1.2 Who is the Handbook intended for?.....	8
I.1.3 The role of statistics	8
I.2 What is rural development and why is it a policy area?.....	10
I.3 Rural development – policy objectives	13
I.4 Why a particular focus on agriculture household income and wealth?.....	14
I.5 Agriculture households, their incomes and policy objectives	16

PART I RURAL DEVELOPMENT STATISTICS

II NATIONAL AND INTERNATIONAL RURAL DEVELOPMENT POLICIES	21
II.1 A few examples of national rural development policies	21
II.2 Rural development - a sectoral based (agriculture) approach	23
II.2.1 The agriculture perspective	23
II.2.2 Trends in agriculture in the last 50 years – employment and productivity	24
II.2.3 The current situation for agriculture.....	25
II.2.4 Other characteristics of agriculture	26
II.2.5 Perspectives on agricultural policy reform and the rural economy.....	26
II.2.6 The farm policy dilemma	27
II.3 Rural development - a territorial based approach.....	28
II.3.1 Employment – the driving force of rural development	28
II.3.2 Trends for rural regions.....	28
II.3.3 Entrepreneurship and job creation in rural areas	29
II.3.4 Are manufacturing and services now the pillars of rural development?.....	30
II.3.5 Merging industry sectors.....	30
II.3.6 Industrial structures and characteristics of rural and urban economies.....	31
II.3.7 Sectoral mix and territorial dynamics.....	31
II.3.8 Education and employment in rural regions.....	31
II.3.9 The role of tourism.....	32
II.3.10 The importance of communications	33
II.3.11 The role of information technology for rural development.....	34
II.3.12 Rural services standards	35
II.3.13 Objectives for rural policies	35
II.3.14 New issues in rural policymaking	35
II.4 Conclusions	36

III	CONCEPTUAL FRAMEWORK.....	43
III.1	Definitions of rural.....	43
III.1.1	Introduction.....	43
III.1.2	OECD.....	43
III.1.3	European Union.....	47
III.1.4	FAO.....	48
III.2	Typologies.....	49
III.2.1	OECD.....	49
III.2.2	European Union.....	54
III.3	Requirements of indicators and their assessment.....	55
III.3.1	Introduction.....	55
III.3.2	OECD.....	56
III.3.3	European Union.....	57
III.3.4	FAO.....	58
III.4	Themes and set of indicators.....	58
III.4.1	OECD.....	58
III.4.2	European Union.....	59
III.4.3	The World Bank.....	60
III.4.4	FAO.....	62
III.5	Indicators – use and misuse.....	63
IV	IV INVENTORY OF NATIONAL APPROACHES TO RURAL DEVELOPMENT STATISTICS.....	69
IV.1	Introduction.....	69
IV.2	Inventory of national rural development statistics.....	70
IV.3	The definition of rural.....	71
IV.4	Current availability of rural development and related statistics.....	72
IV.5	Rural development policy.....	73
IV.6	Next steps.....	76
IV.7	Case study: Canada.....	76
IV.7.1	Introduction.....	76
IV.7.2	Definitions and typologies.....	76
IV.7.3	Results.....	78
IV.7.3.1	Population issues.....	78
IV.7.3.2	Employment and labour force issues.....	80
IV.7.3.3	Income and expenditures.....	84
IV.7.3.4	Social issues.....	86
IV.7.3.5	Business structures and economic growth issues.....	88
IV.7.3.6	Educational issues.....	90
IV.7.3.7	Territorial issues.....	90
IV.7.4	Concluding remarks.....	90
V	INVENTORY OF RURAL INDICATORS BY INTERNATIONAL ORGANIZATIONS.....	101
V.1	Introduction.....	101
V.2	OECD.....	101
V.2.1	Introduction.....	101
V.2.2	Population and migration.....	102
V.2.3	Economic structure and performance.....	103
V.2.4	Social well-being and equity.....	105
V.2.5	Environment and sustainability.....	106

V.3	European Union.....	108
	V.3.1 Indicators suggested in the PAIS report.....	108
	V.3.2 Indicators suggested in the Hay report.....	112
	V.3.3 Common indicators for monitoring rural development programming – midterm review.....	113
V.4	The World Bank.....	113
V.5	FAO.....	114
VI	DATA SOURCES.....	117
	VI.1 Introduction.....	117
	VI.2 Population and housing censuses.....	118
	VI.3 Agricultural censuses and surveys.....	127
	VI.4 Household budget surveys.....	129
	VI.4.1 Living Standards Measurement Study surveys – an introduction.....	131
	VI.4.2 International Household Survey Network.....	132
	VI.4.3 Master sampling frames and master samples.....	133
	VI.4.4 Suggested integrated programme of household surveys.....	134
	VI.5 Labour force surveys.....	136
	VI.6 Other survey sources.....	137
	VI.7 Administrative registers.....	137
	VI.7.1 Vital statistics records.....	138
	VI.8 Non-official statistics, e.g. from trade associations.....	138
	VI.9 GIS and geo-coded statistics.....	138
	VI.10 Conclusions and recommendations.....	139
VII	APPROACHES IN SELECTING A CORE SET OF INDICATORS.....	143
	VII.1 Introduction.....	143
	VII.2 Two approaches in selecting indicators.....	143
	VII.3 Rural indicators classified by themes.....	145
	VII.4 Measures of rurality.....	146
	VII.4.1 Defining the characteristics of an indicator that deals with rurality.....	146
	VII.4.2 Statistical requirements of a rural indicator.....	147
	VII.4.3 Three dimensions of any indicator.....	147
	VII.4.4 A graduated sequence of rural indicators.....	148
	VII.5 Suggested sets of rural indicators.....	149

PART II AGRICULTURE HOUSEHOLD INCOME AND WEALTH

VIII	CONCEPTUAL FRAMEWORK – INTRODUCTION.....	157
	VIII.1 Matching indicators to policy needs in countries at different levels of economic development.....	157
	VIII.1.1 Types of income and wealth statistics needed.....	160
	VIII.2 Households as economic, social and cultural units and as agents for environmental change and conservation – controllers of resources and users of services.....	161
	VIII.3 Concepts of income and wealth and related indicators.....	162
	VIII.4 Households and other forms of institutional units within accounting and statistical systems.....	164

	VIII.4.1	Accounting frameworks	164
	VIII.4.2	Accounts for activities and for institutional units	166
	VIII.4.3	Activity accounts – agriculture as an activity	171
	VIII.4.4	Accounts for institutional units – accounts for farm household-firms	174
VIII.5		Where we are in the provision of income indicators taken from institution-based accounts for household-firms	175
IX		THE AGRICULTURAL HOUSEHOLD – CONCEPTS AND DEFINITIONS	181
	IX.1	Definition of the household appropriate to accounting and statistics	181
	IX.2	Households of different sizes and compositions	185
	IX.3	The rural and urban household enterprise	186
	IX.4	Definition of the agricultural household-firm (enterprise) and those belonging to other socio-professional groups	188
	IX.4.1	Selecting from the “broad” definition of an agricultural household	190
	IX.4.2	Some practicalities of classification	190
	IX.4.3	Choice of other socio-professional groups with which to compare agricultural households	193
	IX.5	Households containing hired labour working in agriculture	194
	IX.6	Relevance for countries with large-scale agricultural enterprises with separate legal status	195
	IX.7	Households in less developed countries	196
	IX.8	Typologies of farm households	197
	IX.8.1	European Union: Eurostat’s IAHS statistics typology	197
	IX.8.2	Economic Research Service farm typology for the United States	201
	IX.8.3	Italy: the ISMEA survey	203
X		DEFINITIONS OF INCOME	207
	X.1	Income as factor rewards and as source of consumption spending	207
	X.2	Relationship between household resources, income and expenditure	207
	X.2.1	Income from self-employment	209
	X.2.2	Income in kind	211
	X.2.3	Living costs	213
	X.3	Individual and household incomes	213
	X.4	Shadow wage and the non-observed economy	216
	X.5	Various income concepts and relationships between them	217
	X.5.1	Extended and full incomes	218
	X.5.2	The importance of time to income measurement	218
	X.5.3	Lifetime income and permanent income hypothesis	220
	X.6	Subsidies, preferential tax treatments and income measures	221
	X.7	Definitions in use	222
XI		INCOME LEVELS, DISTRIBUTION AND POVERTY	235
	XI.1	The assessment of poverty	235
	XI.1.1	Social exclusion	235
	XI.2	Ways of measuring the incidence of poverty among households	236
	XI.2.1	Low-income rate (Cumulative proportions below percentiles of the median)	238
	XI.2.2	The low-income gap	238

	XI.2.3	Relative income level by percentile	239
	XI.2.4	Cumulative decile shares – Lorenz curve.....	239
	XI.2.5	Gini coefficient.....	240
	XI.2.6	Sen index	240
	XI.2.7	Warning in the interpretation of coefficients.....	241
XI.3		Poverty lines and inequality measures in practice in agriculture	242
XII		MEASUREMENT AND COMPOSITION OF FARM HOUSEHOLD WEALTH	247
	XII.1	Introduction	247
		XII.1.1 Wealth of farm households in the United States.	249
	XII.2	Selected uses of farm and household wealth measures	249
	XII.3	Differences in wealth measurement for farms and farm operator households.....	251
	XII.4	Connection between farms and households in wealth measurement.....	251
	XII.5	Data to support estimates of household net worth.....	252
	XII.6	Extending analyses of household economic status and well-being	256
	XII.7	Measurement and composition of household wealth in developing countries	259
		XII.7.1 Household enterprises module	259
		XII.7.2 Agriculture module.....	260
		XII.7.3 Savings module	261
		XII.7.4 Credit modules	262
	XII.8	Conclusions	264
XIII		INVENTORY OF METHODOLOGIES USED: AGRICULTURE INCOME AND WEALTH STATISTICS.....	271
	XIII.1	Data sources for agricultural income statistics – generic sources	271
		XIII.1.1 Types of data sources	272
	XIII.2	Survey of definitions and measurement issues in selected countries	276
		XIII.2.1 Predominately developed countries (UNECE and OECD countries)	276
		XIII.2.1.1 Background	276
		XIII.2.1.2 Definition of household.....	277
		XIII.2.1.3 Definition of agricultural household	279
		XIII.2.1.4 Definition of rural household	282
		XIII.2.1.5 Treatment of special institutions	282
		XIII.2.1.6 Classification into socio-economic groups when using the “narrow” definition of an agricultural household	282
		XIII.2.1.7 Short-term stability mechanism	283
		XIII.2.1.8 Equivalence scales.....	283
		XIII.2.1.9 Own consumption	285
		XIII.2.1.10 Imputed rent	286
		XIII.2.1.11 Calculation of net disposable income of agriculture households – items covered	286
		XIII.2.1.12 Conclusions	287
	XIII.2.2	Selected developing countries.....	287
		XIII.2.2.1 Background	287
		XIII.2.2.2 Definition of household.....	289
		XIII.2.2.3 Definition of agricultural household	293

	XIII.2.2.4	Classification into socio-economic groups.....	294
	XIII.2.2.5	Short-term stability mechanism	296
	XIII.2.2.6	Equivalence Scale	296
	XIII.2.2.7	Own consumption	297
	XIII.2.2.8	Imputed rent	300
	XIII.2.2.9	Calculation of net disposable income of agriculture households	301
XIV		INCOME AND WEALTH STATISTICS FOR SELECTED COUNTRIES.....	319
	XIV.1	United States.....	319
	XIV.1.1	The Agricultural Resources Management Survey (ARMS)	319
	XIV.1.1.1	Origin of the ARMS as a principal USDA survey	320
	XIV.1.1.2	ARMS design characteristics	323
	XIV.1.1.3	Content of current ARMS survey questionnaires.....	323
	XIV.1.1.4	ARMS: An evolving survey.....	327
	XIV.1.2	Agriculture household income and wealth statistics	332
	XIV.1.2.1	Introduction	332
	XIV.1.2.2	Income and well-being of farm households	332
	XIV.1.2.3	Income and expenditures by household size	332
	XIV.1.2.4	Farm households working more off the farm and accumulating wealth.....	332
	XIV.1.2.5	Largest farms have most income, wealth and debt.....	333
	XIV.1.2.6	Location influences household income and wealth.....	333
	XIV.1.2.7	Comparing farm and non-farm income and wealth.....	334
	XIV.1.2.8	Farm households save more, spend less than non-farm households.....	334
	XIV.1.2.9	Main findings and policy implications.....	335
	XIV.2	Italy.....	343
	XIV.2.1	The ISMEA survey	343
	XIV.2.1.1	Overview	343
	XIV.2.1.2	The survey.....	343
	XIV.2.1.3	The sample design.....	343
	XIV.2.1.4	The questionnaire	344
	XIV.2.1.5	Production and factor use information are structured by activity.....	344
	XIV.2.1.6	From the farm operation to the farm household-firm unit perspective	344
	XIV.2.1.7	An agricultural standard of living survey.....	345
	XIV.2.1.8	From an agricultural to a rural living standard survey	345
	XIV.2.2	The REA survey and the RICA-REA project	347
	XIV.2.2.1	Overview	347
	XIV.2.2.2	Survey characteristics.....	348
	XIV.2.2.3	The questionnaire	348
	XIV.2.2.4	From micro to macro estimates.....	349
	XIV.2.2.5	Conclusions and final recommendations.....	351
	XIV.2.3	Survey of Household Income and Wealth	351
	XIV.2.3.1	The data.....	351
	XIV.2.3.2	Economic conditions of rural and agricultural households	352
	XIV.2.3.3	Conclusion.....	354
	XIV.3	Denmark – register based agricultural income statistics	357

XIV.3.1	Introduction.....	357
XIV.3.2	Combining of registers and income information.....	357
XIV.3.3	Comparison between farmers and other professional groups	358
XIV.3.4	Comparison between different types of farms	359
XIV.3.5	Development of wealth in agricultural households.....	362
XIV.4	Sweden – another example of register-based statistics	363
XIV.4.1	Introduction.....	363
XIV.4.2	Agriculture household income 1999-2002.....	363
XIV.4.3	Agriculture household income according to IAHS – comparison between socio-economic groups	363
XIV.5	Canada.....	367
XIV.5.1	Gross and net revenues per farm – medium-sized farms have the highest operating margin.....	367
XIV.5.2	Farm operators' off-farm income exceeds net cash farm operating revenue	367
XIV.5.3	Total farm family income increases steadily as a result of increasing off-farm income.....	368
XIV.5.4	Steady increase in wealth accumulation	369
XIV.5.5	Notes to the data and the data sources	370
XIV.6	European Union.....	378
XIV.6.1	Introduction.....	378
XIV.6.2	An overview of results	380
XIV.6.3	Availability of results.....	380
XIV.6.4	Main findings	381
XIV.6.5	Numbers of agricultural households	381
XIV.6.6	Composition of income of agricultural households, and deductions	382
XIV.6.7	Stability of income of agricultural households	383
XIV.6.8	Comparisons of the income of agricultural households with the all-households average	383
XIV.6.9	Comparison with other socio-economic groups.....	384
XIV.6.10	Income situation of “marginal” households	385
XIV.6.11	Farm households “broad” definition compared to all households	386
XIV.7	Australia	391
XV	FINDINGS AND GOOD PRACTICES IN STATISTICS ON RURAL DEVELOPMENT AND AGRICULTURAL HOUSEHOLD INCOME.....	399
XV.1	Introduction	399
XV.2	Statistics for rural development.....	400
XV.2.1	Key issues in rural statistics	401
XV.2.2	Rural measurement problems.....	403
XV.3	Statistics on the incomes and wealth of agricultural households	405
XV.3.1	Methodological issues in measuring agricultural household income and wealth	407
XV.3.2	Provision of data – the data system for agricultural household income measurement	411

ANNEXES

ANNEX 1	LIST OF TASK FORCE MEMBERS <i>[reference from preface]</i>	415
ANNEX 2	A SUMMARY OF EU AGRICULTURE AND RURAL DEVELOPMENT POLICIES <i>[reference from chapter II]</i>	417
ANNEX 3	RESULTS OF UNECE SURVEY ON METHODS USED FOR MEASURING RURAL DEVELOPMENT STATISTICS IN UNECE AND OECD MEMBER COUNTRIES <i>[reference from chapter IV]</i>	425
ANNEX 4	EUROPEAN UNION RURAL INDICATORS <i>[reference from chapter V]</i>	457
ANNEX 5	WORLD BANK INDICATORS <i>[reference from chapter V]</i>	469
ANNEX 6	THE IMPORTANCE OF NATURAL AMENITIES <i>[reference from chapter V]</i>	483
ANNEX 7	A MORE FORMAL APPROACH TO “FULL INCOME” <i>[reference from chapter X]</i>	491
ANNEX 8	HOUSEHOLD BALANCE SHEET <i>[reference from chapter XII]</i>	495
ANNEX 9	RESULTS OF UNECE SURVEY ON METHODOLOGIES USED FOR MEASURING AGRICULTURE HOUSEHOLD INCOME STATISTICS IN UNECE AND OECD MEMBER COUNTRIES <i>[reference from chapter XIII]</i>	497
ANNEX 10	FROM AGRICULTURAL TO RURAL STANDARD OF LIVING SURVEYS	
	<i>[reference from chapter XIII]</i>	529