

SIAP/UNFPA/USP Sub-regional training on Using Population and
Census Data for Sub-national Planning: Thematic Analysis on Youth
5-9 August 2013

Use of Census data to estimate internal and international migration

Dr Alessio Cangiano

Senior Lecturer, Population & Demography Program

School of Economics, FBE

University of the South Pacific

Major implications of migration for policy and planning

2

- ❑ Internal migration is a major driver of urban growth
- ❑ Immigrants might have special needs, for example:
 - Housing
 - Counseling
 - Health (refugees)
- ❑ Immigrants play a particular role in the labour market, e.g. fill labour shortages in some industries or set up businesses (return migrants)
- ❑ Emigration – depletion of working age cohorts, brain drain, remittances

Some issues needing policy attention in the Pacific

3

- ❑ Unplanned urban growth (e.g. informal settlements)
- ❑ Emigration contributes to depopulation either at national level or in outer islands (small Polynesian countries)
- ❑ Loss of human resources (skilled health personnel, teachers and professionals), e.g. Fiji
- ❑ Possible reductions in remittances due to reduced commitments to home societies (how to maintain remittance flows?)
- ❑ Long-term or permanent movement is the primary emigration stream but temporary labour migration is of increasing importance

Migration-related questions in census form (Fiji)

4

D10. What is this person's place of birth ? <i>The place of birth is where mother usually lived at time of person's birth. (State Province or Country if outside Fiji)</i>	<input type="text"/>
D11. What is this person's usual place of residence ? <i>(State Province or Country if outside Fiji)</i>	<input type="text"/>
D12. Where did this person live five years ago ? (on 16 September 2002) <i>(State Province or Country if outside Fiji)</i>	<input type="text"/>
D13. <i>(For Fijians and Rotumans only)</i> . What is this person's place of origin ? (<i>koro dina</i>). <i>(State Province of Origin)</i>	<input type="text"/>
D14. What is this person's residency status ? <i>(Tick appropriate box)</i>	1. <input type="checkbox"/> Fiji Citizen 2. <input type="checkbox"/> Permit Holder 3. <input type="checkbox"/> Visitor

REMITTANCES:

H15. Does this household receive money from overseas? Tick appropriate box.

1. Yes (Go to H15A) 2. No (Go to Disability Section)

H15A. If yes, give a rough estimate how much is received within last 12 months : F\$

H15B. What is the country of residence of sender.

H15C. What is the relationship of sender to 'head of household' (Enter relationship inside front cover)

H15D. What is the occupation of sender

H15E. How is the money usually received? (Enter mode of transfer inside front cover)

Internal migration

- Censuses are most useful for measuring internal mobility
- Definition of internal mobility depends on distance and territorial units of analysis (divisions, provinces etc.)

Examples:

- **Inter-provincial mobility:** from one province to another
- **Intra-regional mobility:** within the same region
- Classification of the territorial unit (i.e. rural or urban) allows the identification of different types of flows (e.g. rural-urban, urban-urban, etc.)

Measurement of internal migration

Two main categories:

- **Lifetime migrants:** place of enumeration (or usual place of residence) different from place of birth
- **Recent (or period) migrants:** place of enumeration different from place of residence 1 or 5 years before the census

Measurement of international migration

- **Lifetime immigrants:** foreign-born (or foreign-national)
- **Recent (or period) immigrants:** place of residence was overseas 1 or 5 years before the census
- Place of birth and place of residence before the census can be cross-tabulated to identify **return migrants** (people born in the country who had been residing overseas)

Measurement of net migration

8

Censuses do not provide estimates of out-migration but **net inter-censal migration** can be estimated using the population balancing equation:

$$P^{2011} = P^{2001} + B^{2001-11} - D^{2001-11} + I^{2001-11} - E^{2001-11}$$

$$P^{2011} = P^{2001} + NI^{2001-11} + NM^{2001-11}$$

$$NM^{2001-11} = P^{2011} - P^{2001} - NI^{2001-11}$$

P = Population

B = Births

D = Deaths

I = Immigration

E = Emigration

NI = Natural Increase

NM = Net migration

Example of citizenship tabulation (Samoa, 2011 census)

9

Table 2.4: Total population by country of citizenship and urban-rural residence, 2011

Residence	Country of citizenship						
	Total	Samoa	Samoa and New Zealand	Australia and New Zealand	United States of America	Others	ns
Samoa	187820	180398	3818	1246	1184	1167	7
URBAN							
Apia Urban Area	36735	33765	1548	510	371	538	3
Vaimauga West	24105	22103	1081	366	217	335	3
Faleata East	12630	11662	467	144	154	203	0
RURAL							
North West Upolu	62390	59635	1403	478	430	442	2
Vaimauga East	7730	7387	147	71	42	82	1
Faleata West	18895	17683	632	176	169	234	1

Example: identification of period migration (Samoa, 2011 census)

10

Territorial unit of analysis is the region

Place of enumeration	Place of residence 5-year before the census				
	Apia Urban Area	N-W Upolu	Rest of Upolu	Savaii	Overseas
Apia Urban Area	27,157	1,168	882	1,004	1,562
North West Upolu	1,473	47,111	1,301	1,521	1,862
Rest of Upolu	447	694	35,201	524	874
Savaii	424	685	455	35,971	571

Non migrants

Internal migrants to Apia Urban Area

International migrants to Apia urban Area

Internal migrants from Apia Urban Area

Example of period migration tabulation (Samoa, 2011 census)

11

Table ... - Inter-regional migration in the 5 years before the census

Region	Population (5 years +)	in-migrants	out- migrants	net migration	net migration rate (000)
Samoa	160,961	10,578	10,578	0	
Apia Urban Area	31,808	3,054	2,344	710	22.3
North West Upolu	53,290	4,295	2,547	1,748	32.8
Rest of Upolu	37,752	1,665	2,638	-973	-25.8
Savaii	38,111	1,564	3,049	-1,485	-39.0

Conclusions

- Migration has major policy implications in the Pacific (e.g. urban planning, remittances, labour market policies)
- Censuses include several migration-related questions (e.g. place of birth and residence 5 years before the census) that can be used to estimate internal and – to a lesser extent – international migration
- Migration statistics are relatively underdeveloped in the Pacific and there is large scope for producing more accurate and comprehensive data