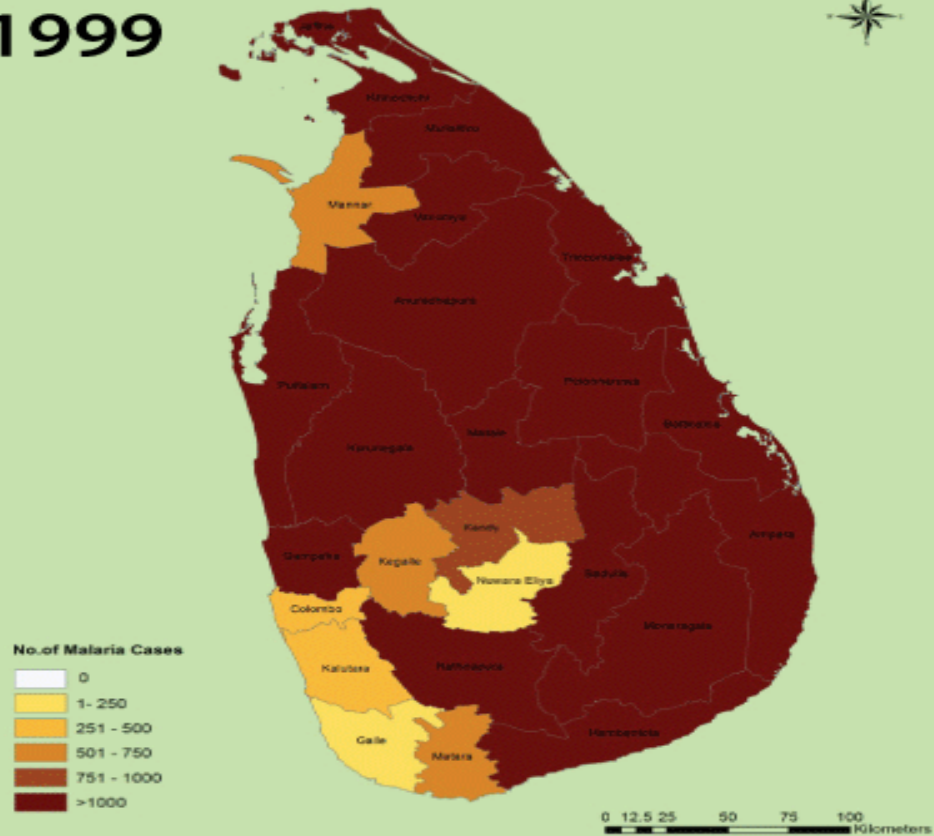


1999



The Elimination of malaria in Sri Lanka

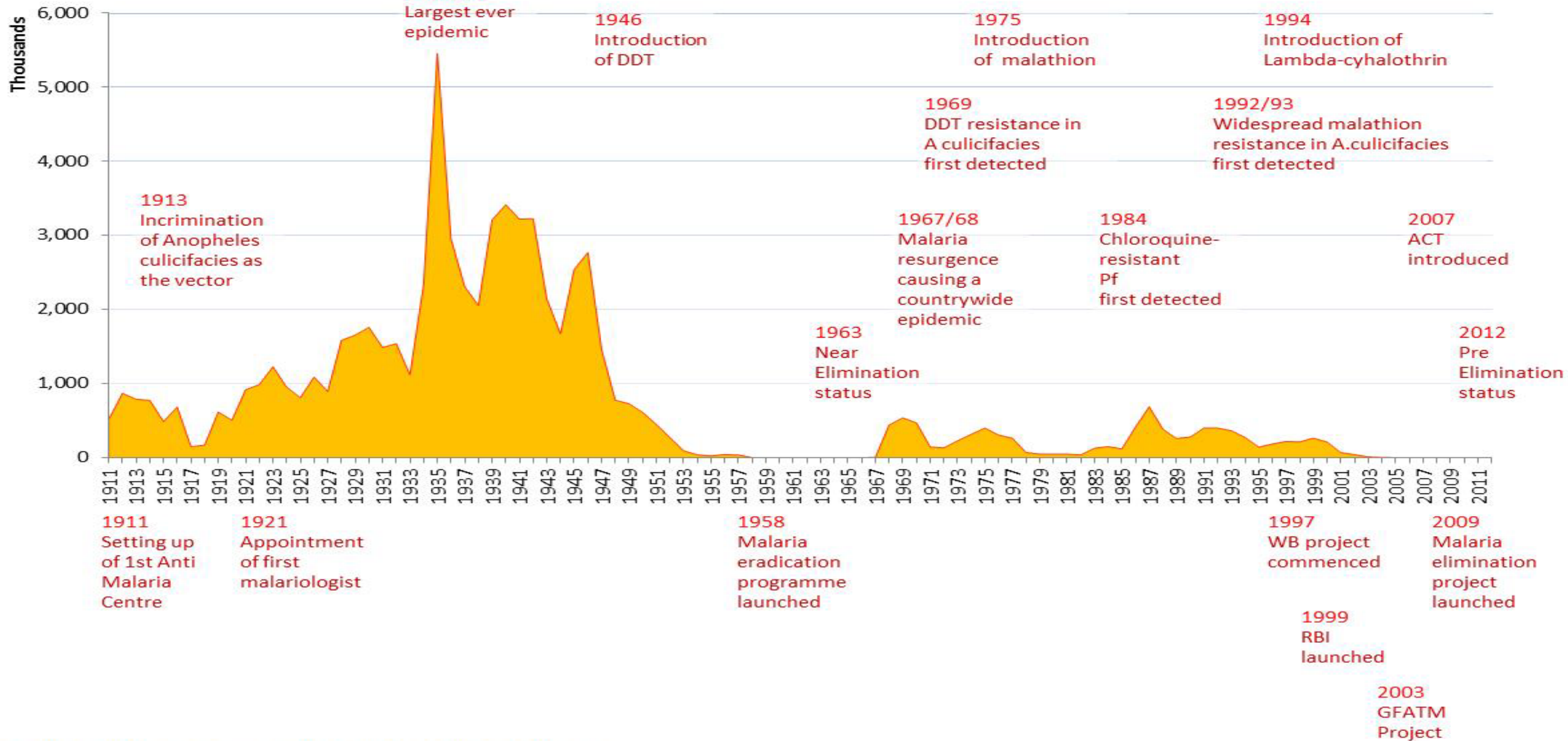


Source: Anti-Malaria Campaign, Sri Lanka Ministry of Health

Rajitha Wickremasinghe
Professor of Public Health
University of Kelaniya
Sri Lanka



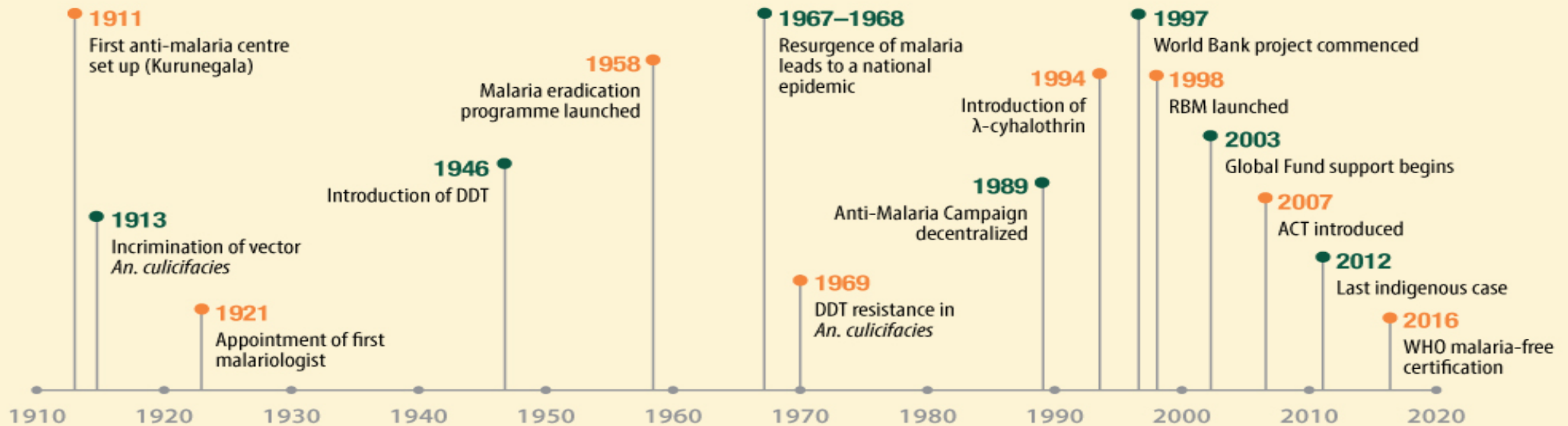
Malaria Cases (000')



Source: Anti Malaria Campaign , Ministry of Health Sri Lanka



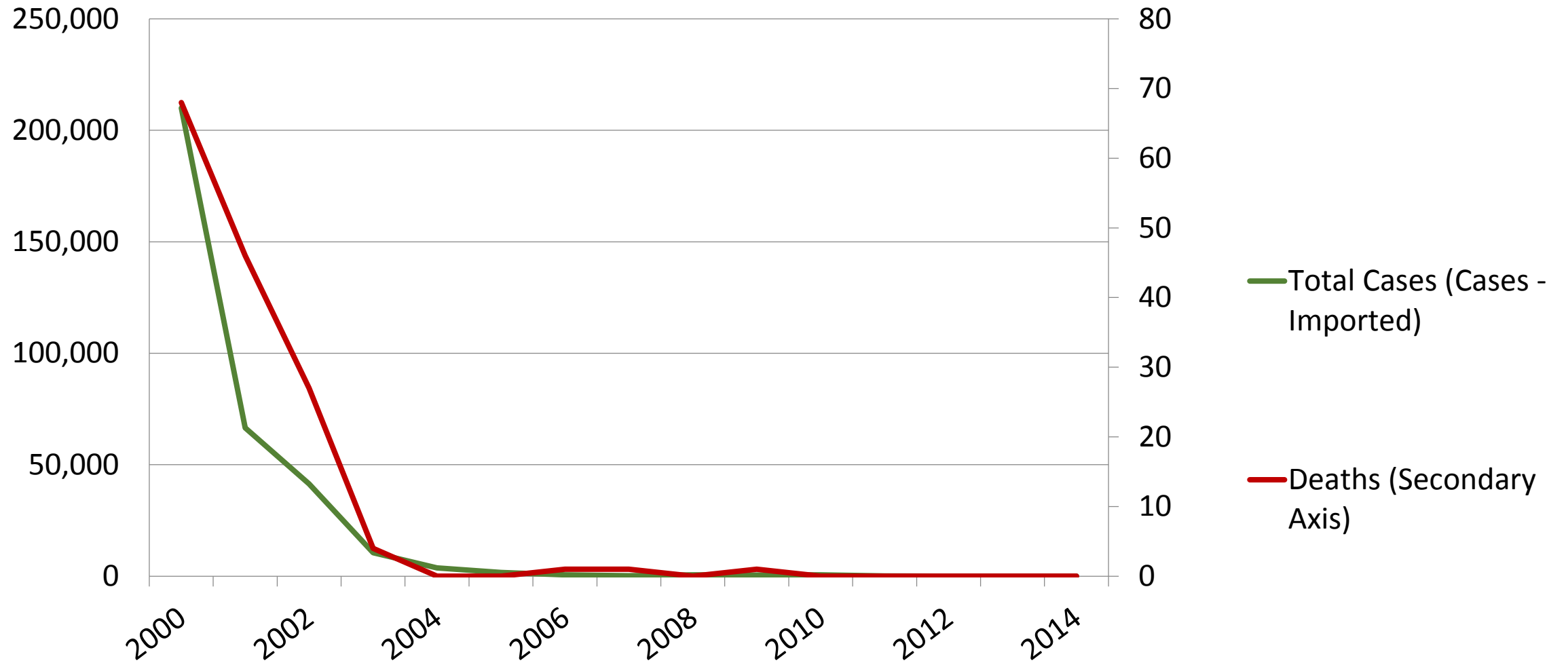
Timeline of malaria elimination in Sri Lanka



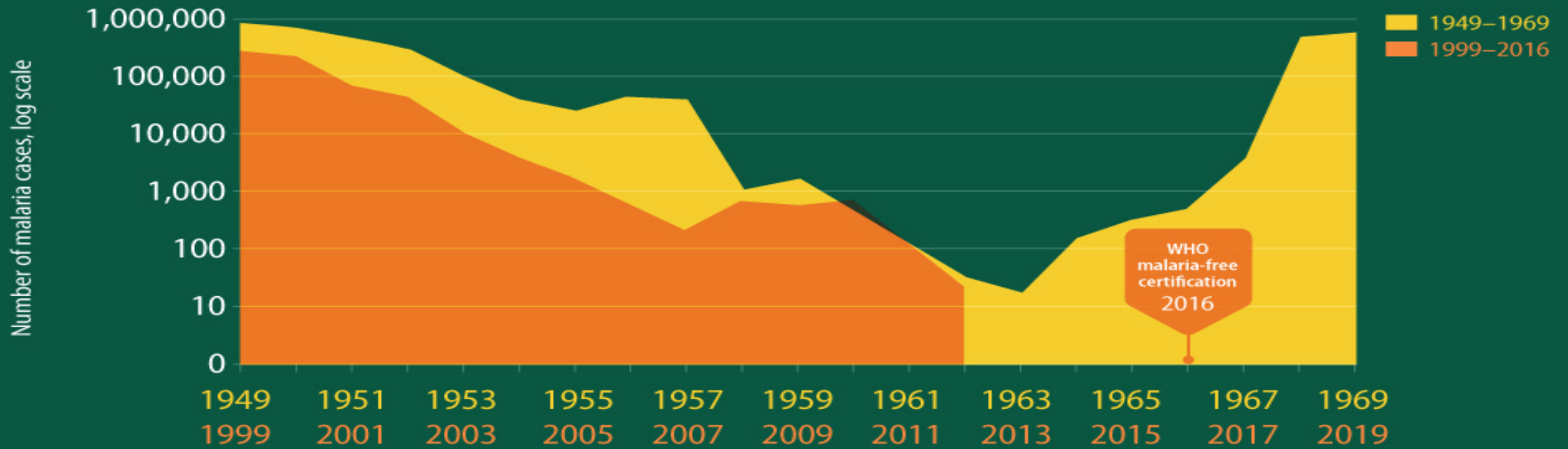
Source: Anti-Malaria Campaign, Sri Lanka Ministry of Health



Sri Lanka



Two opportunities for malaria elimination in Sri Lanka

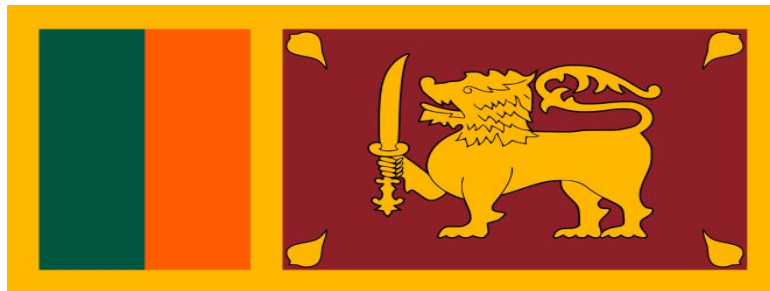


Source: Anti-Malaria Campaign, Sri Lanka Ministry of Health



Remarkable progress to elimination – how did we do it?

This **enormous accomplishment** is the result of dedicated, multi-pronged efforts of healthcare staff and policy decision-makers over two decades:



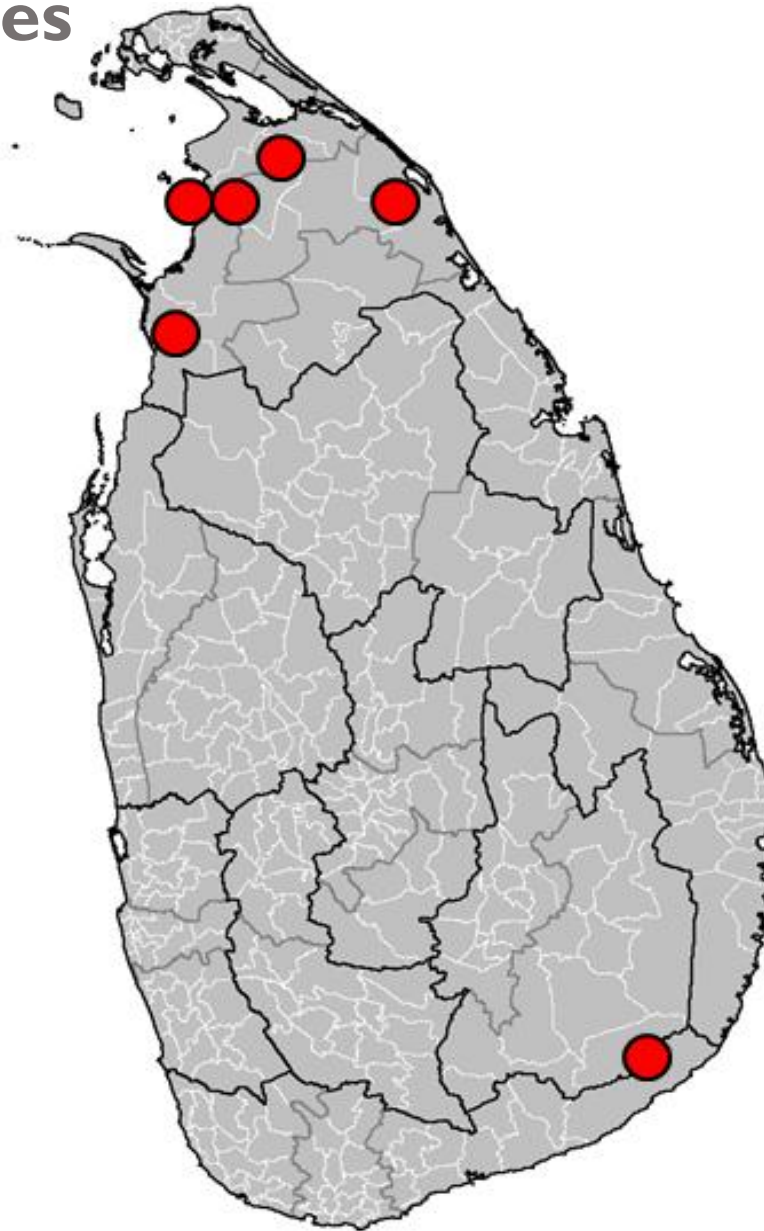
- Targeting high-risk populations with aggressive quality assured **diagnosis and treatment** (microscopy, RDTs, ACT)
- Radical and complete cure
- Access to diagnosis and treatment
- Targeting high-risk areas with **vector control** interventions (ITNs, IRS)
- Strong programme management and emphasis on **surveillance**
- **Rapid response**
- **Strong partnerships** (military, UNHCR, etc)
- Political commitment and **leadership** from the Anti-Malaria Campaign
- **Investment** from government administrations and the Global Fund



Malaria among Armed Forces Personnel 2009/2010

- 55% of all cases were relapses
- Index cases of almost all local outbreaks were relapsing cases
- Six foci (hot spots) were defined
 - Vellankulam
 - Mulankavil
 - Killinochchi/Kokavil
 - Thunukkai
 - Mulathivu
 - Yala

Collaborated with SLA to provide radical cure



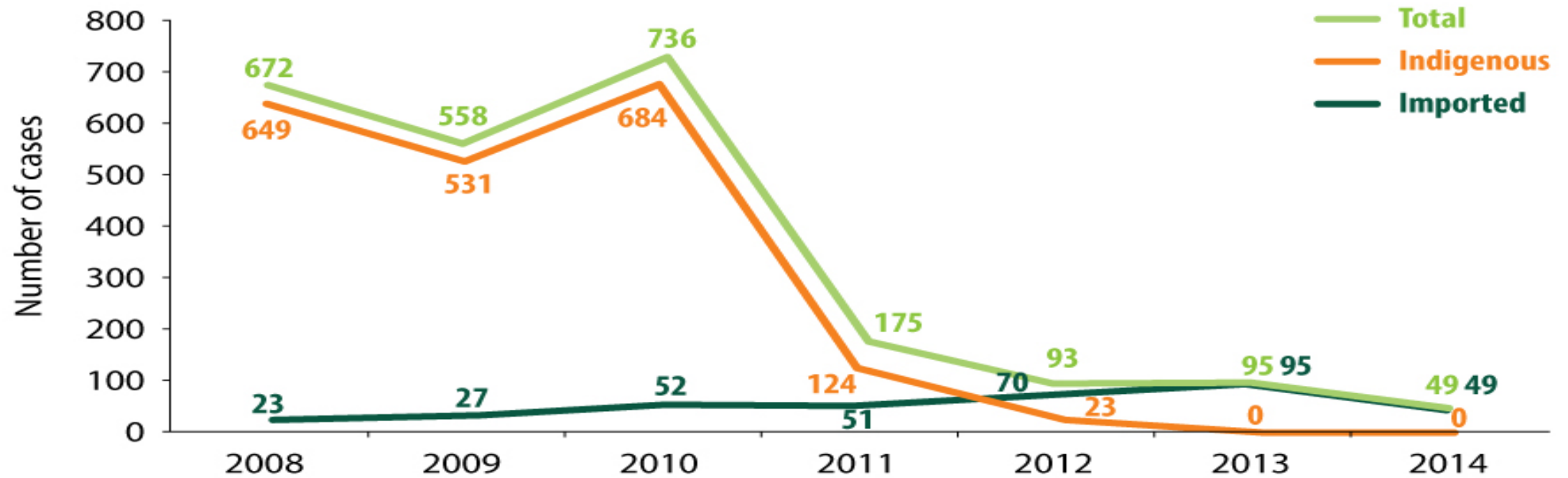
Contributor: Lt. Col Saveen Gamage, Sri Lanka Army

Disease burden due to malaria 1999-2016

Year	Number of Cases		Number of deaths
	Indigenous	Imported	
1999		264,549	102
2000		210,039	76
2001		66,522	53
2002		41,411	30
2003		10,510	4
2004		3,720	1
2005		1,640	-
2006		591	-
2007		198	1
2008	649	23	-
2009	531	27	-
2010	684	52	-
2011	124	51	-
2012	23	70	-
2013	-	95	-
2014	-	49	-
2015	-	37	-
2016	-	41	-



Indigenous and imported malaria in Sri Lanka



Source: Anti-Malaria Campaign, Sri Lanka Ministry of Health

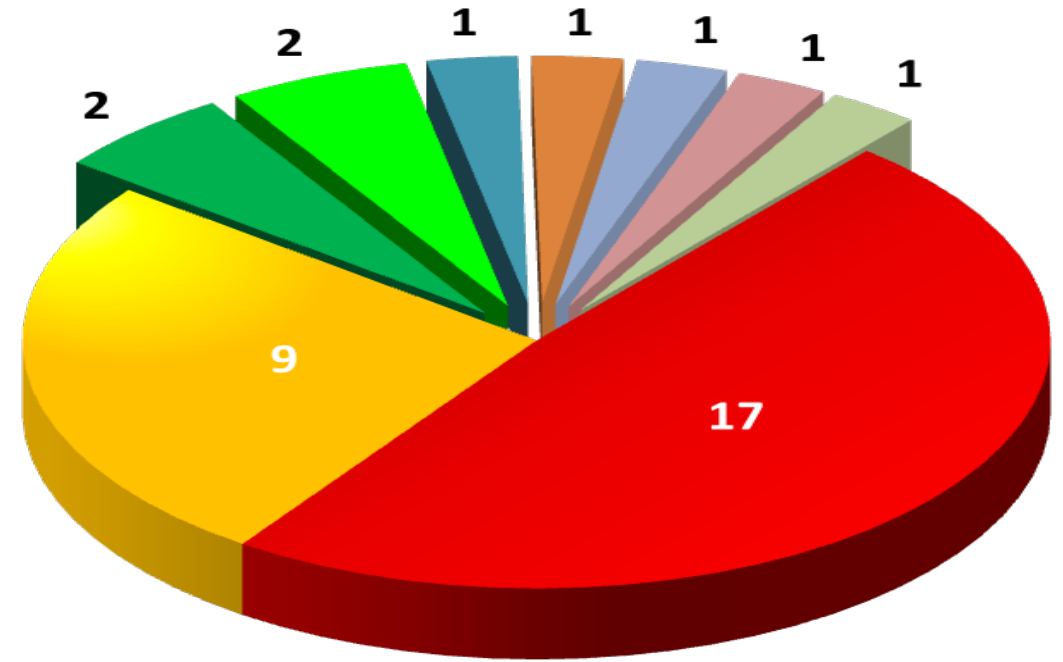
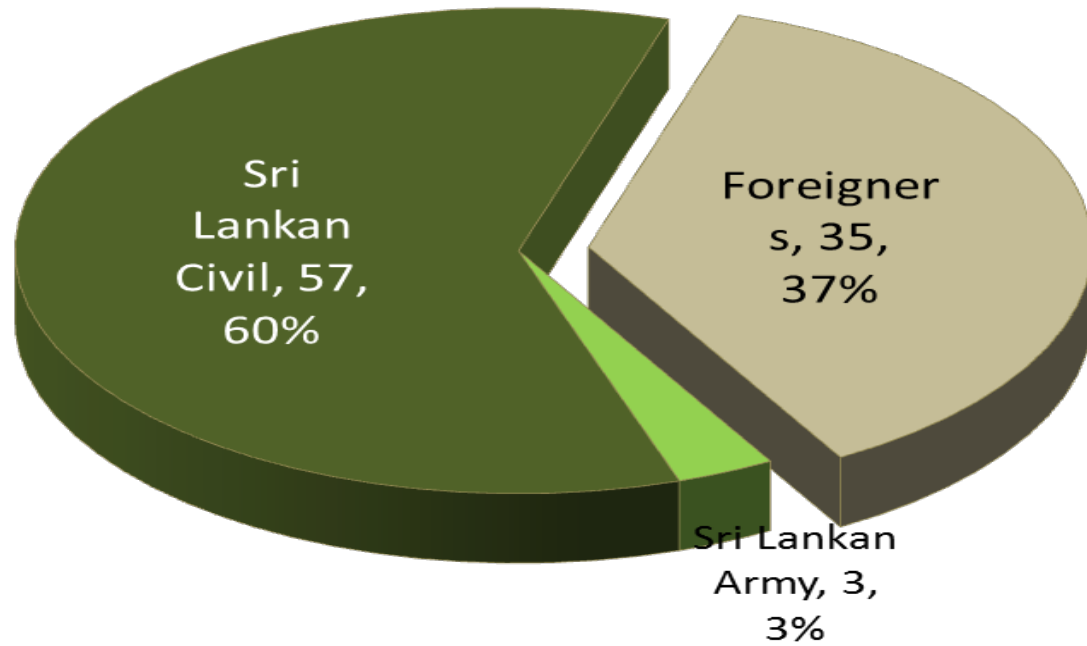


Distribution of imported cases by country of origin, 2012

Country	Total	Case detection site & type of malaria						
		At PoE		Within the country				
		Pf	Total	Pv	Pf	Po	Mixed	Total
Benin	20	16	16		4			4
Ghana	1				1			1
Guinea	5	1	1		3		1	4
Haiti	2	1	1		1			1
India	28			24	1		3	28
Liberia	4				2	2		4
Nigeria	3				3			3
Pakistan	2			2				2
Sierra Leon	2				1		1	2
Togo	2	2	2					
West Africa (Gabon)	1				1			1
Total	70	20	20	26	17	2	5	50



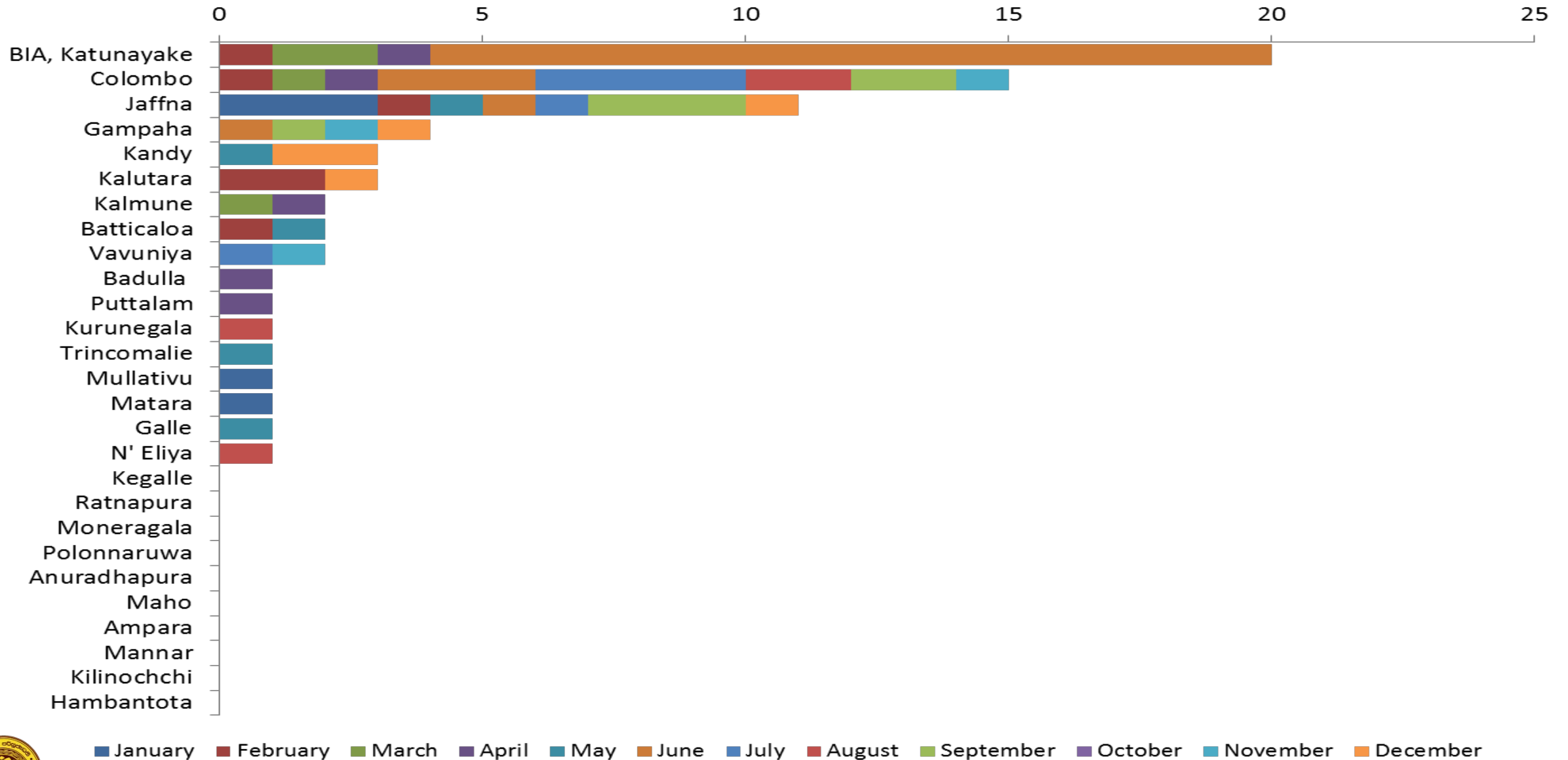
Distribution of imported cases by nationality-2013



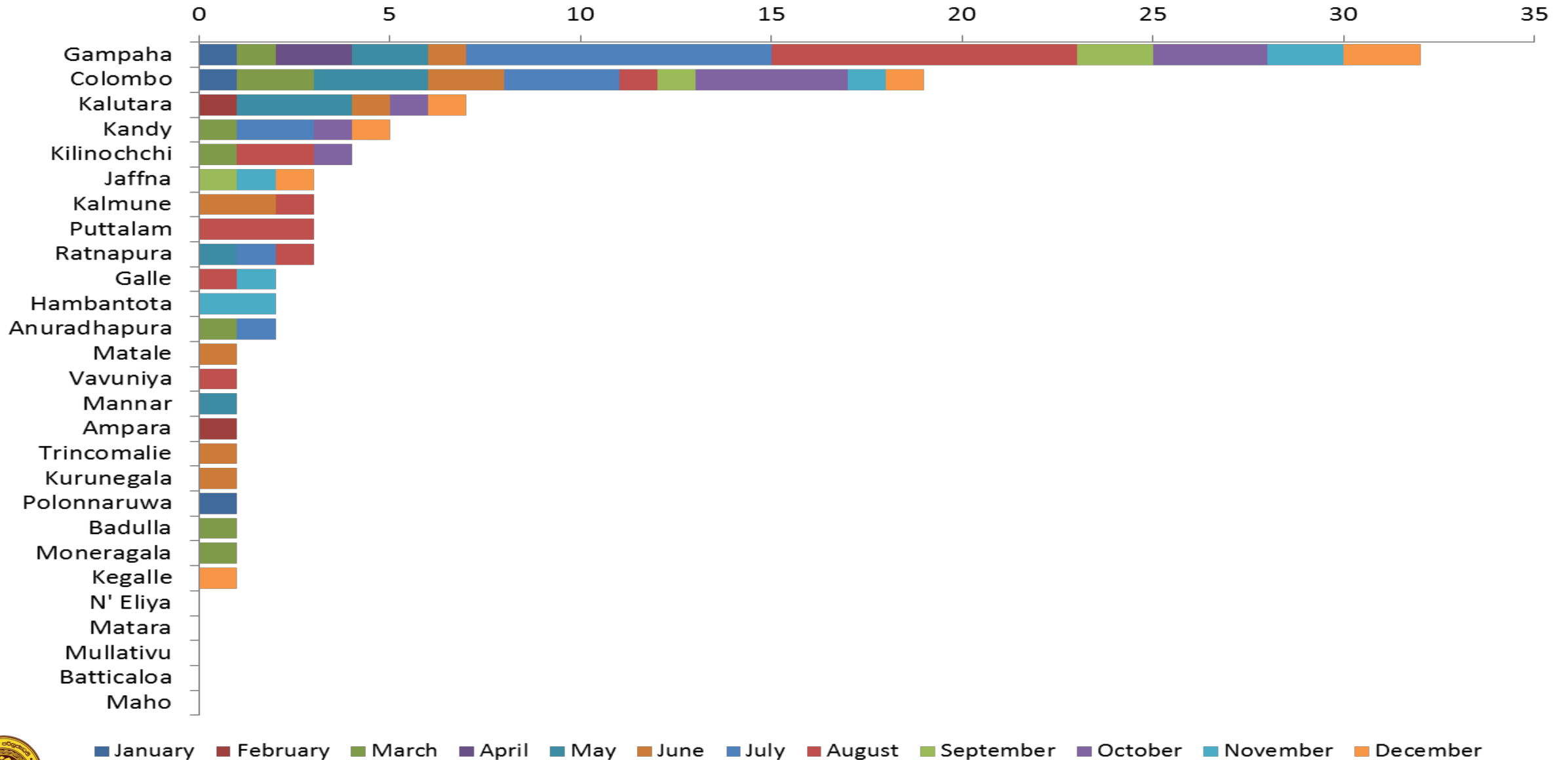
- Pakistani
- Indian
- Burmese
- Ugandan
- English
- Korean
- Indonesian
- Tajik



Distribution of cases by district/RMO Region-2012



Distribution of cases by district/RMO Region-2013



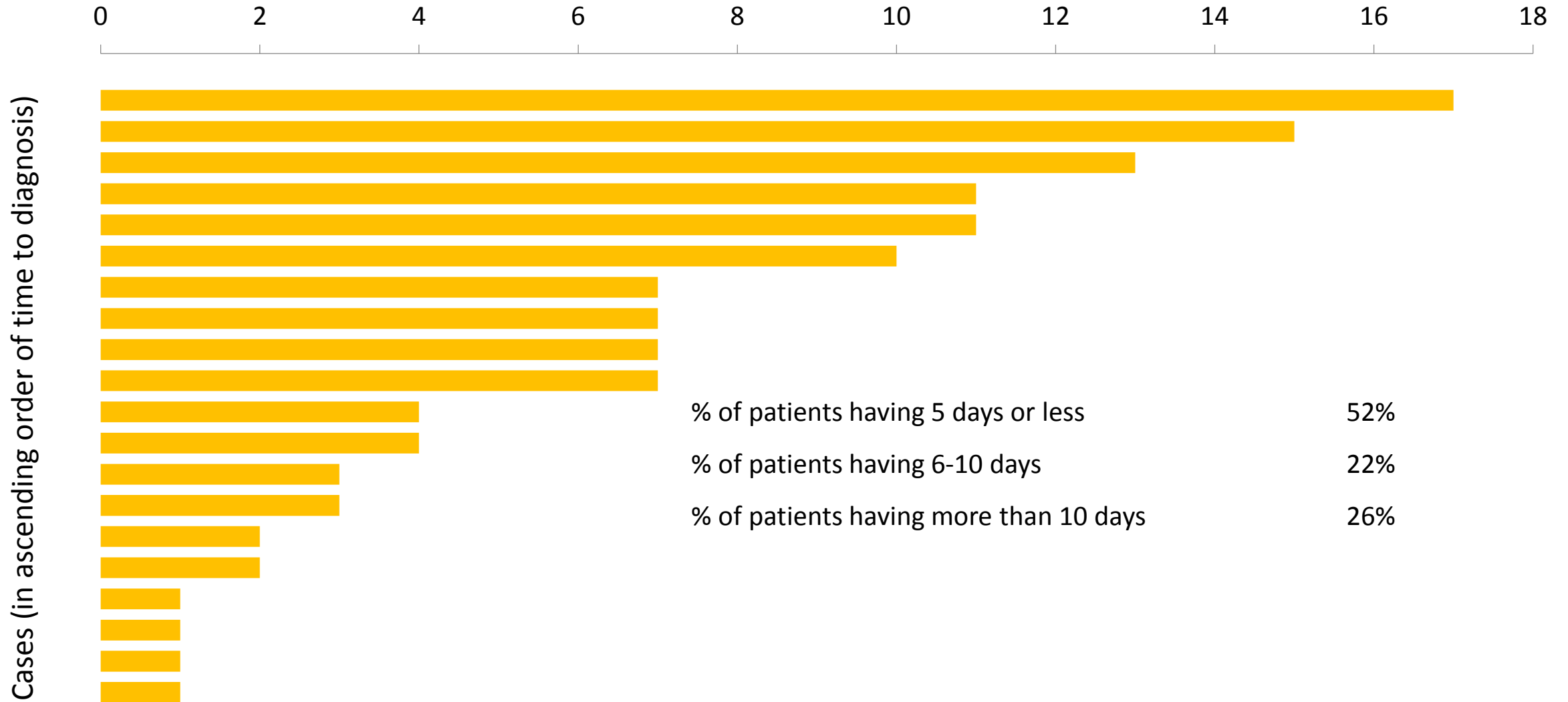
Serious threats could re-introduce malaria and reverse historic gains

- Imported cases and cross-border issues
- Presence of the mosquito vector
- Resistance to artemisinin and insecticides
- Health security
- Lost immunity
- Malaria is forgotten
- Donor dependency



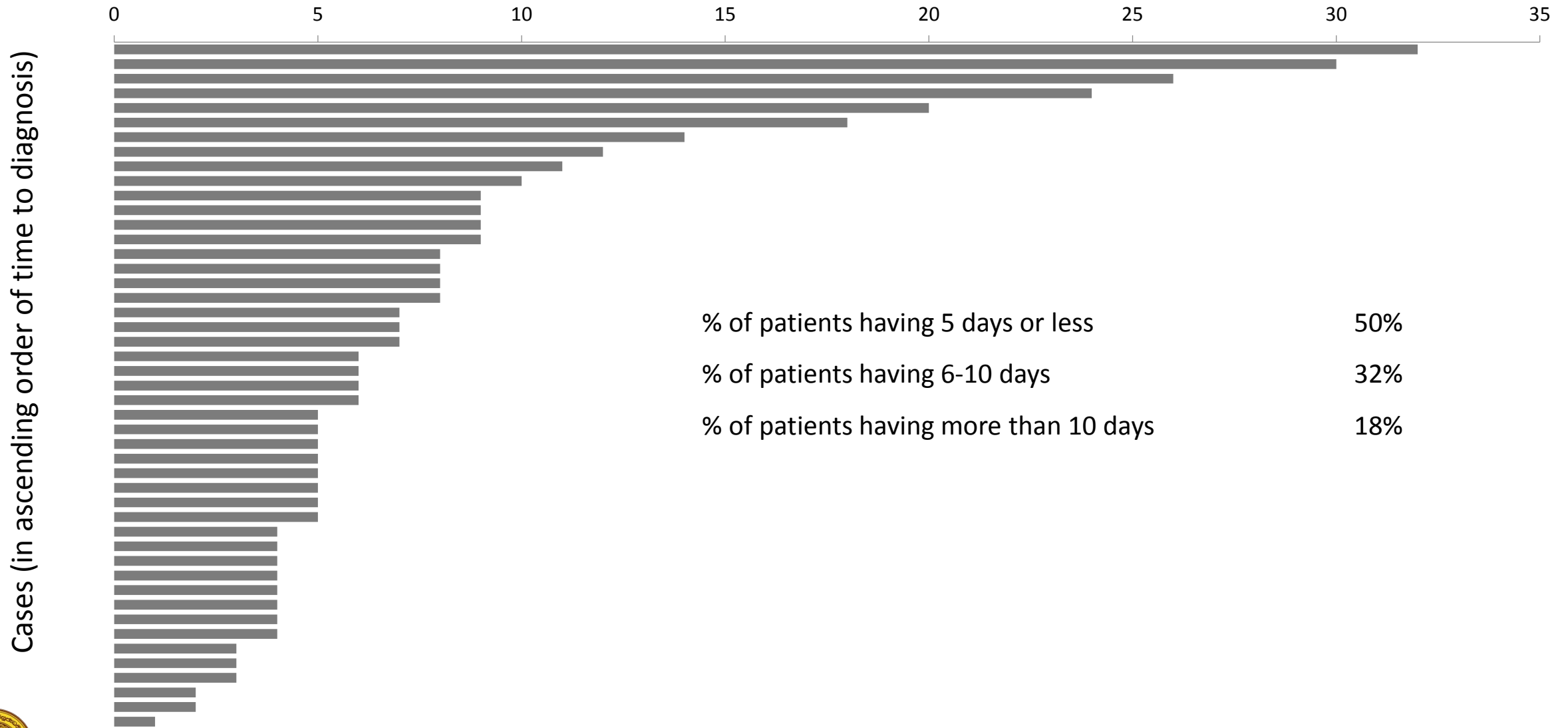
Time to diagnosis in indigenous malaria patients -2012

Days from onset of illness to blood test



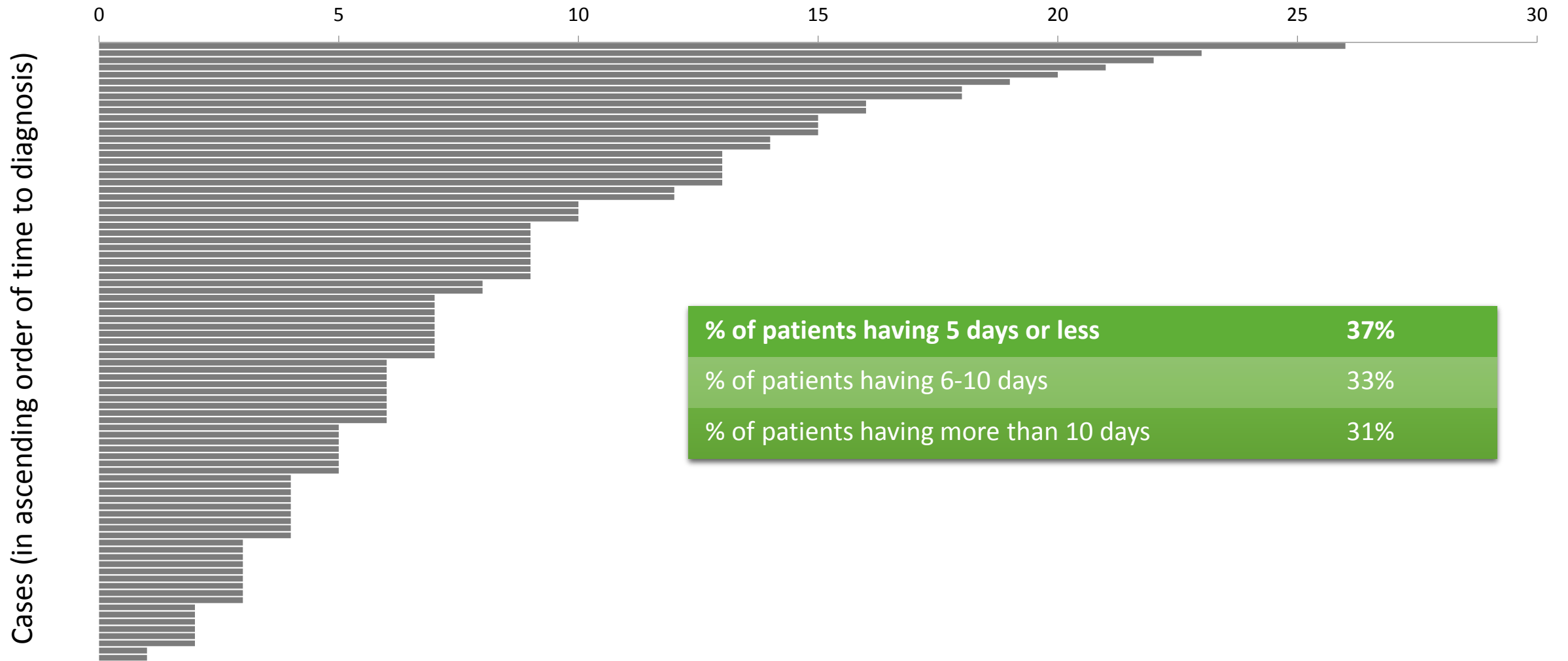
Time to diagnosis in imported malaria patients - 2012

Days from onset of illness to blood test



Time to diagnosis in imported malaria patients - 2013

Days from onset of illness to blood test



Four Strategies

- Strengthening surveillance for malaria case detection
- Maintaining clinical skills for diagnosis and treatment of malaria
- Strengthening entomological surveillance and response through integrated vector management
- Strengthening systems for outbreak forecasting, preparedness, prevention and response



6 cross-cutting approaches

- IEC to raise awareness of the malaria elimination programme
- Quality assurance
- Enhanced monitoring and evaluation
- Improved programme management and performance
- Operations and implementation research
- Working in partnerships



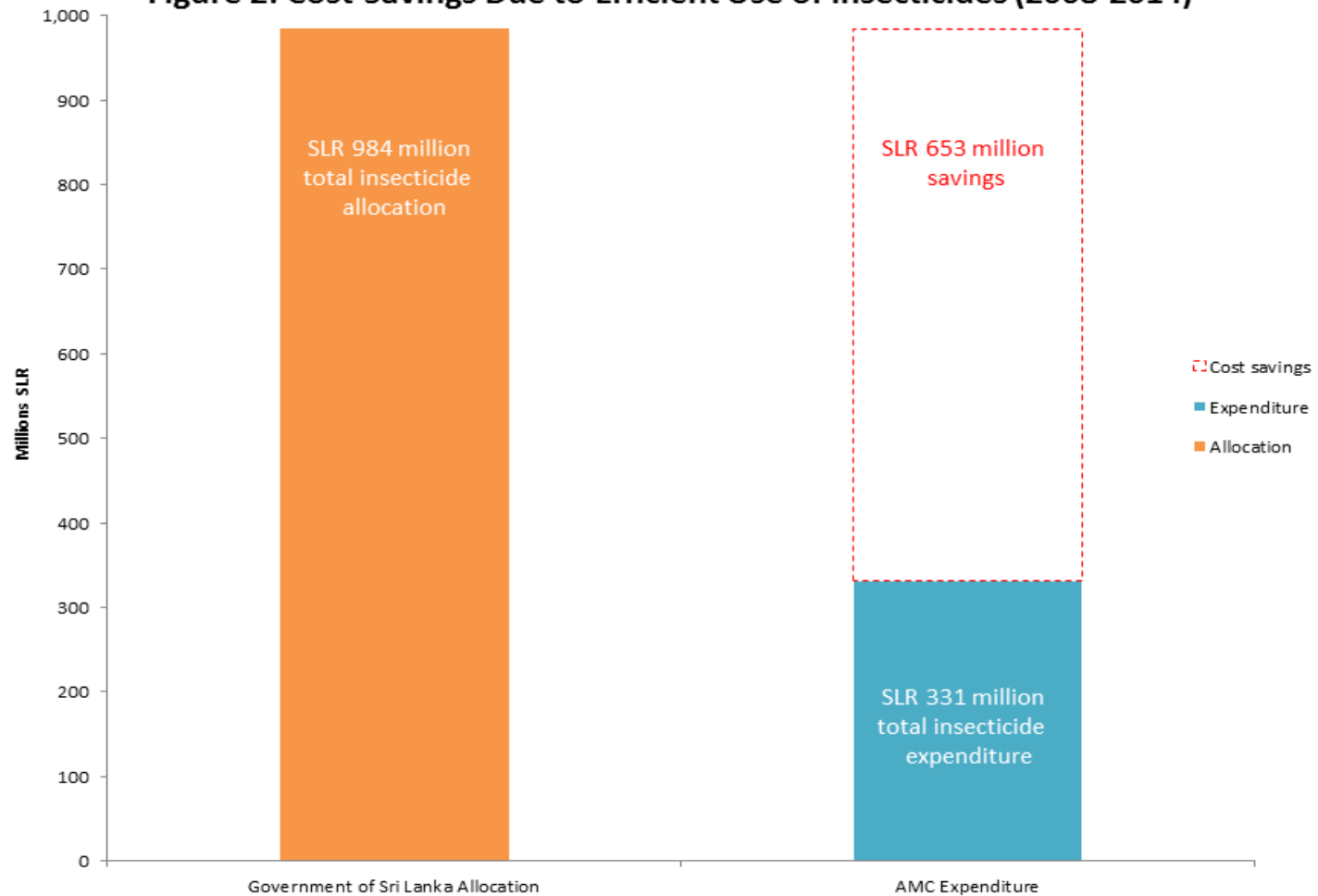
Prevention of Reintroduction (PoR) requires re-doubled commitment for critical malaria programming

1. Maintaining a strong and resilient malaria **surveillance** system
2. Monitoring and controlling the mosquito **vector**
3. Screening people who are at high risk of **importing** malaria
4. Ensuring that health care providers and communities remain **vigilant and aware** of malaria prevention, symptoms, and treatment



Cost savings

Figure 2: Cost-Savings Due to Efficient Use of Insecticides (2008-2014)





Thank you

