

Sustainable development: What can ICTs contribute?

Rohan Samarajiva

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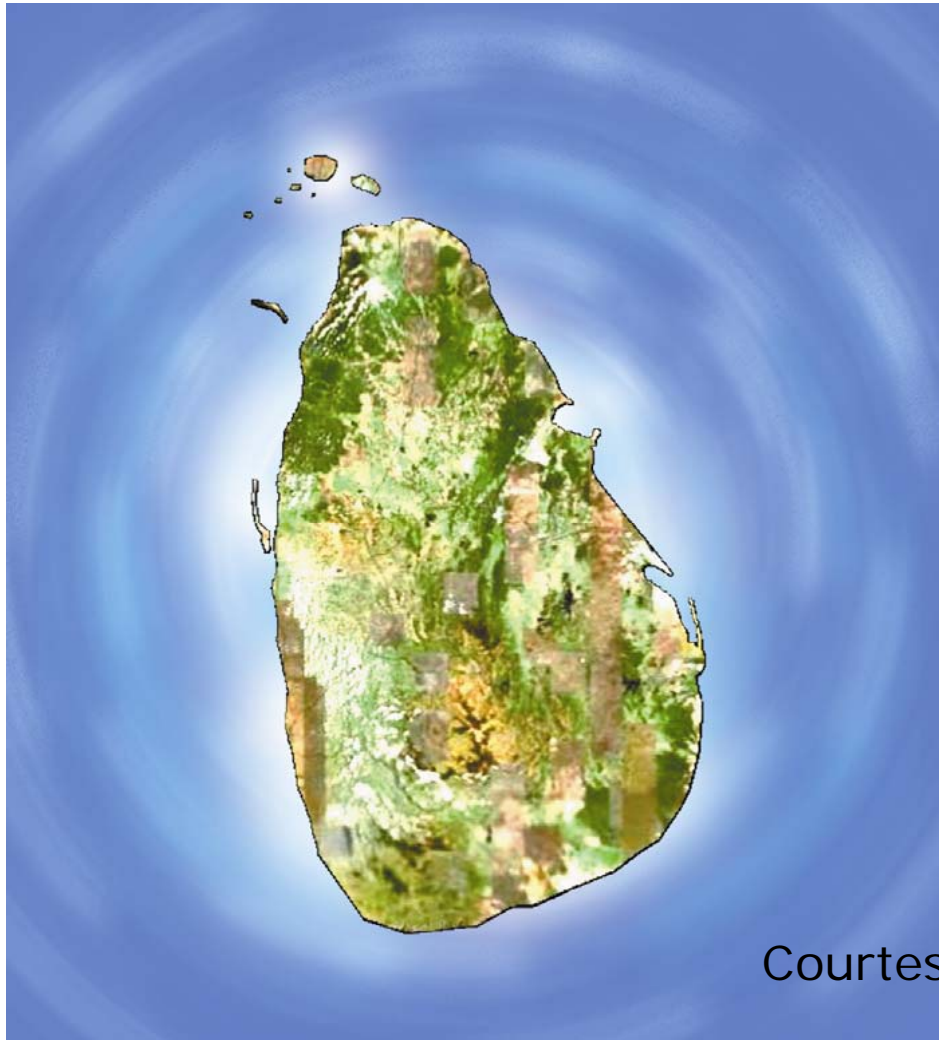


Sustainable development

- *Development that meets the needs of the present without compromising the ability of future generations to meet their own needs*

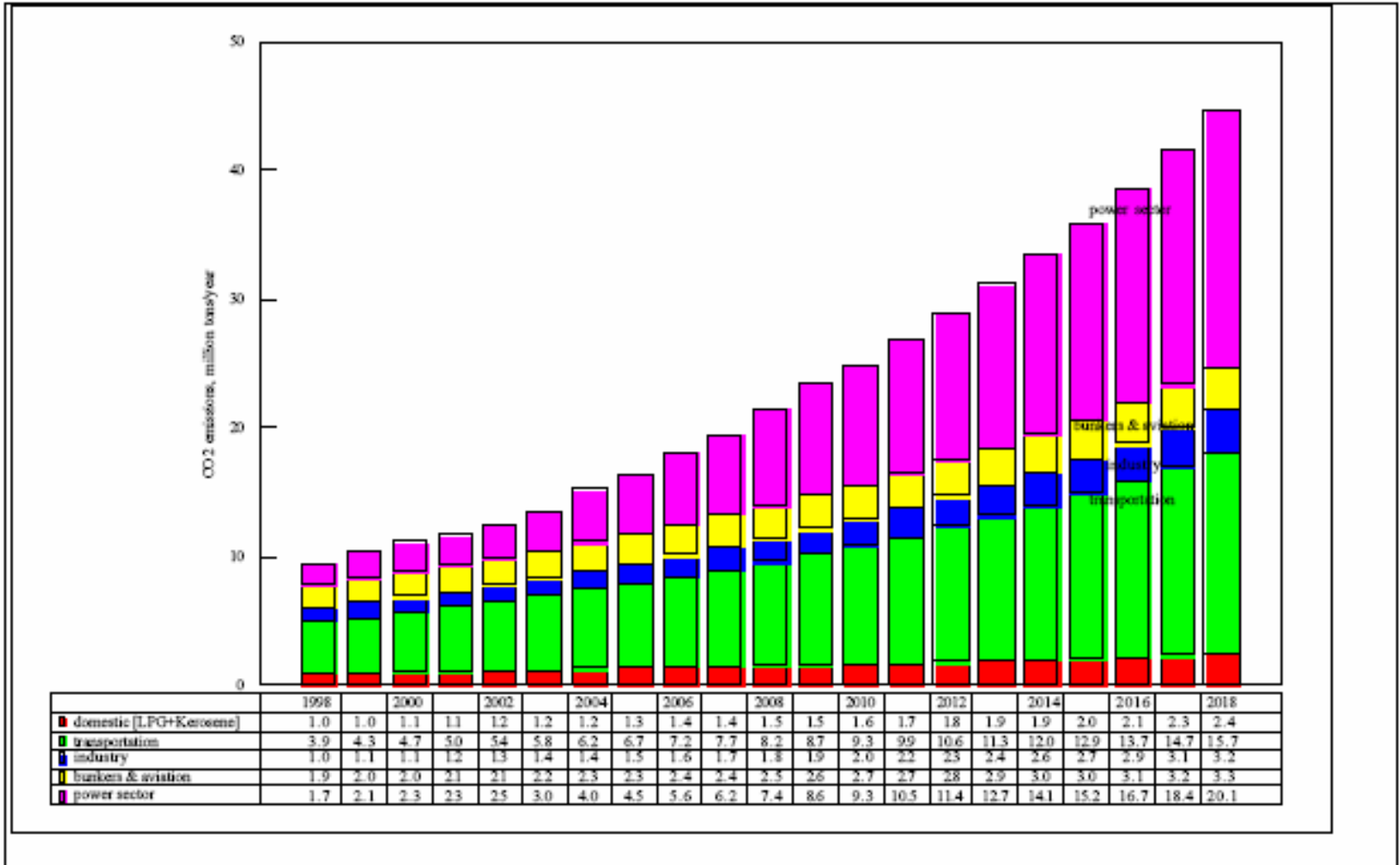
Brundtland Commission

What global warming may mean for Sri Lanka . . .



Courtesy Montage, April 2007

Greenhouse gas emission projections in Sri Lanka to 2018 (transport sector contribution in green)



Source: Global Overlay Study of Greenhouse Gas Mitigation Options in the Sri Lanka Power Sector

Why it pays to telecommute

Table 1: Car journey time survey results (as average speeds, km/hour): Inward direction, morning peak

		1997	1999	2001
Colombo-Galle	Maliban Junction to Dickman Road	28	18	8
Colombo - Ratnapura	Maharagama to Kirulap	32	16	6
Colombo – Kandy	Kadawatha to Orugodawatte	23	22	11
Colombo - Puttalam	Mahabage to Kelani Bridge	18	16	7
Jayawardanapura - Kollupitiya	Battaramulla to Senanayake Junction	23	17	9
Colombo-Horana	Papiliyana to Vilasitha Nivasa Junction	27	17	8
Wellampitiya – Kaduwela	Abatale to Wellampitiya	28	18	9

Source: Transport Studies Planning Centre, Ministry of Transport

Think of all the exhaust pipes spewing poison . . .

Requirements for transportation-telecom tradeoff

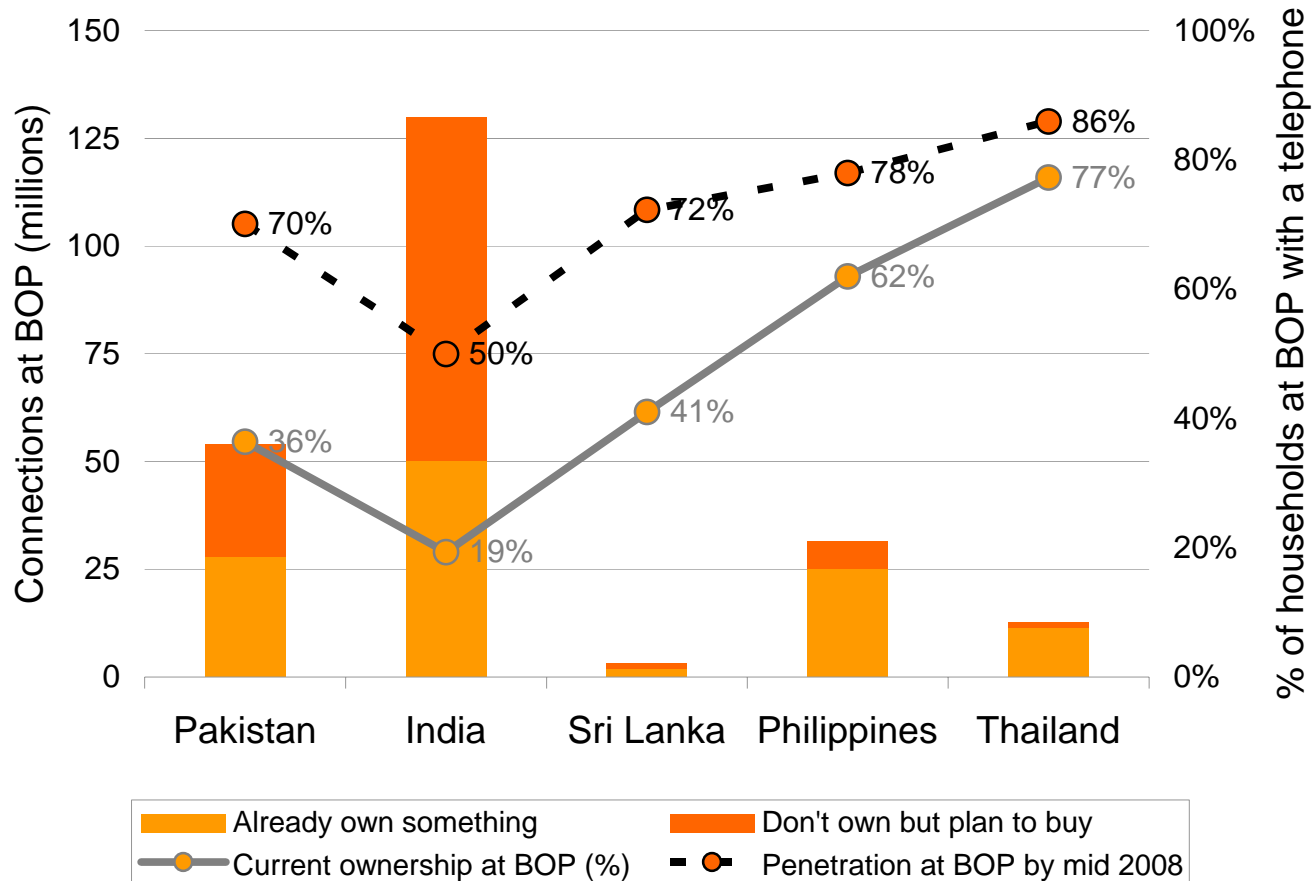
- ❑ Most people must have easy and convenient access to telecom, for sending/receiving messages and for retrieving/publishing information
- ❑ All offices and businesses must be reachable through telecom
- ❑ Organizations must change business processes to reduce the need for people to physically come to their locations
- ❑ Ancillary infrastructures such as energy, payment, trust, verification and delivery systems must facilitate tele-transactions

But, the first is the necessary condition

- Most people must have easy and convenient access to telecom, for
 - Sending/receiving messages and
 - Retrieving/publishing information

**Necessary condition met in Sri Lanka,
at a rudimentary level**

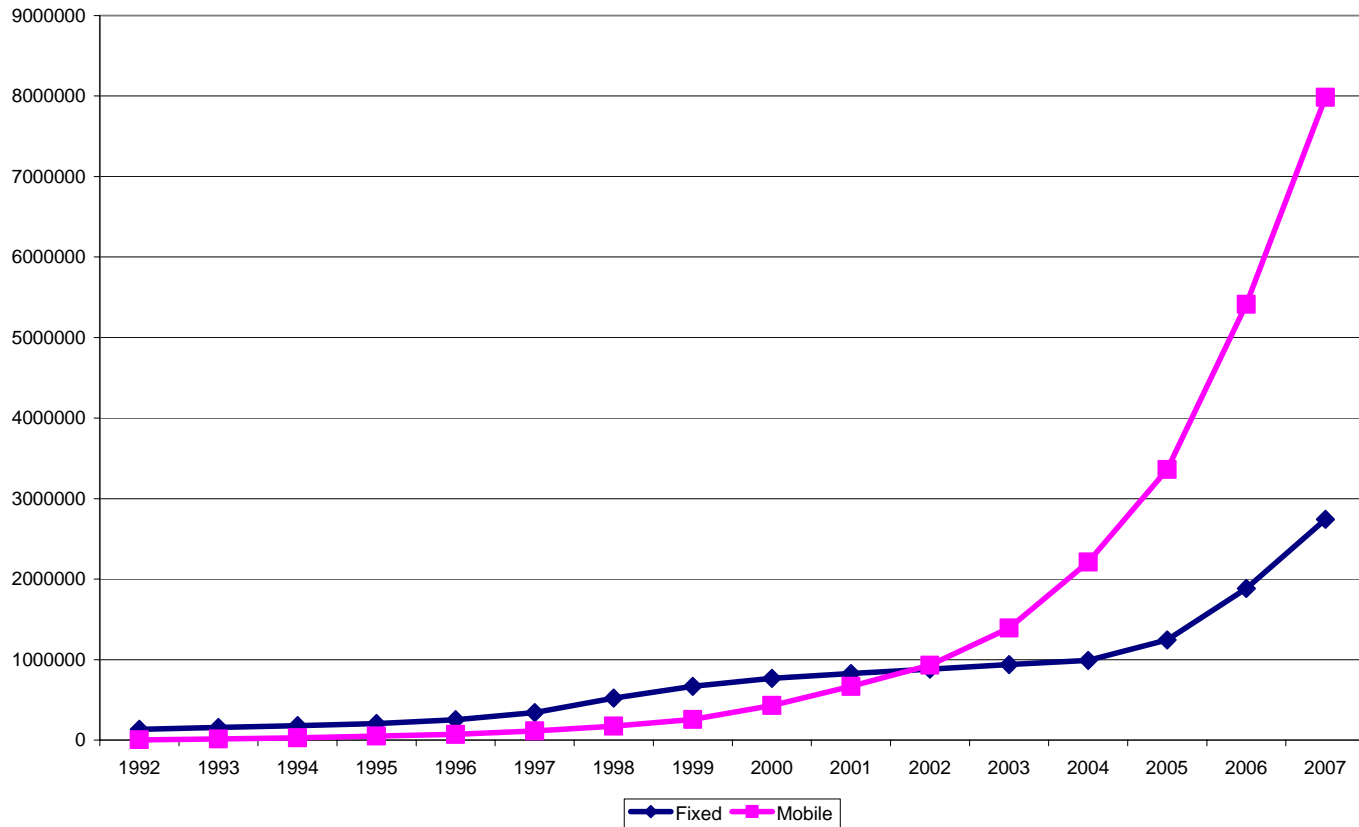
72% of Sri Lanka BOP has access in 2008 (projected) → higher for country as a whole



Source: LIRNEasia

Supported by TRC data

Fixed and mobile telephone growth in Sri Lanka, 1992-2007



Source: Telecom Regulatory Commission of Sri Lanka



Sufficient conditions include availability of applications, e.g.,

- Government Information Centre (1919)
already in place, more can be done
- Information to make agricultural markets
more efficient, about to start

1919 any given day

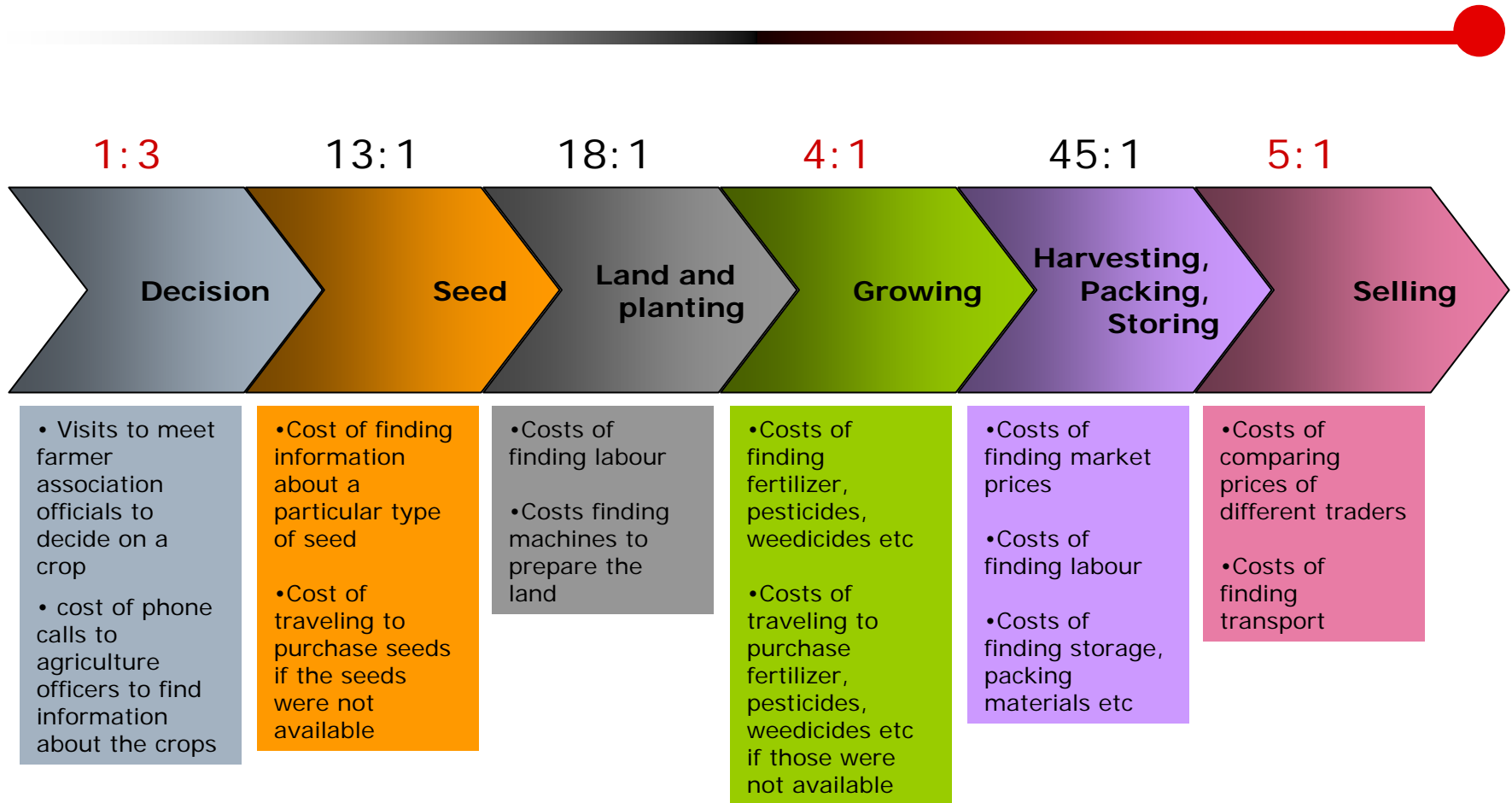


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Dambulla market any given night: Sri Lanka's largest & the focus of LIRNEasia's research



Transaction costs in the agricultural value chain (non-information transaction costs: information costs)



Dambulla market fails to clear: Elephantine efforts on 25 tons of waste vegetables (worst day)



එළවළු කන වල් අලි රංචුවක්

එළවළු වෙන් 25 ක් අලිත්ව කවයි.

දඹුලු ගොවියා අලි අමරුවේ

දඹුලු උද්ඝාත-වන සුමාර ආර්යයා

දඹුලු ආර්ය මධ්‍යස්ථානයේ ගොඩගැසී තුබූ එළවළු වෙන් 25 ක් අසල කැලයේ වල් අලිත්තේ ආහාර බවට පත්විය. අලෙවි නොවී වැස්සටද අසු වූ එම එළවළු අතර ගෝවා තෝතෝල්, රාඛු, පතෝල, කැකිරි හා වට්ටක්කා හිඹිඹි. එළවළු මිලට ගැනීමට වෙළෙඳුන් නොපැමිණීම මේ එළවළු විසි කිරීමට එක් හේතුවකි. ආර්ය මධ්‍යස්ථානය යටි ගොවියන්ගෙන් එළවළු බාර ගැනෙනුයේ විකුණා මුදල්දීමේ කොන්දේසිය මතය.

සායාරූප දඹුලු උද්ඝාත-වන සුමාර ආර්යයා



Talking about Kyoto is good . . .

**Doing something practical here and
now is better**



Source: <http://earthobservatory.nasa.gov/>