

The Government of The Republic of Vanuatu

## ICTs in Health and Education Office of the Government Chief Information Officer (OGCIO)

Fred Samuel, Chief Information Officer



### Agenda:



Situation in Health & Education



Benefits of ICTs in these Areas



Recommended Actions & Budget

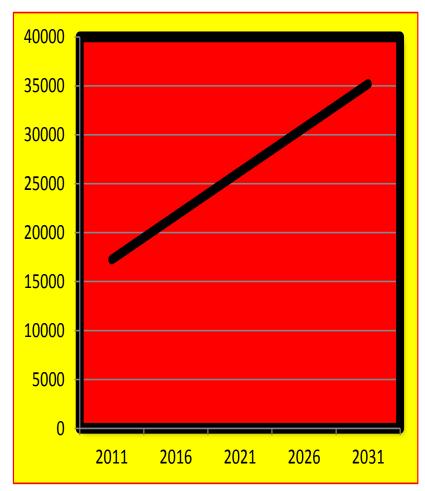


# Situation in Health & Education

# Non-communicable diseases (NCDs) are killing Ni-Vans in Vila, towns and villages

- † 70% of all adult Ni-Van deaths are from NCDs (diabetes, heart + lung disease, stroke)
- † Causes: poor diet, smoking, lack of exercise
- † Number of diabetes cases is rising fast:





Forecast diabetes cases in Vanuatu, WHO

## Vanuatu's patients are isolated from world-class medicine

- † Lack of access to specialized medical expertise
- † Inadequate medical records
- † Inadequate medical information system





Republic of Vanuatu

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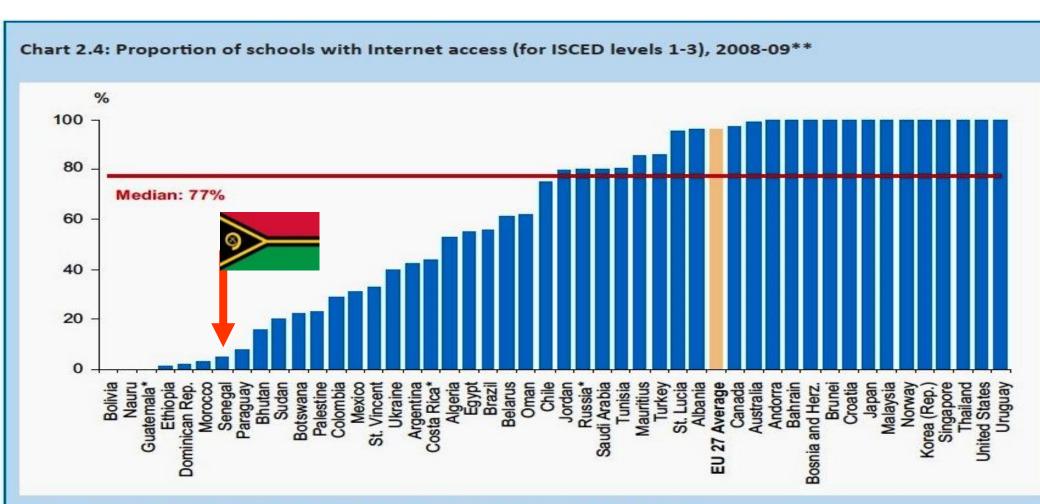
#### Personnel and HR MIS issues have affected morale





## Only 6% of schools have Internet access

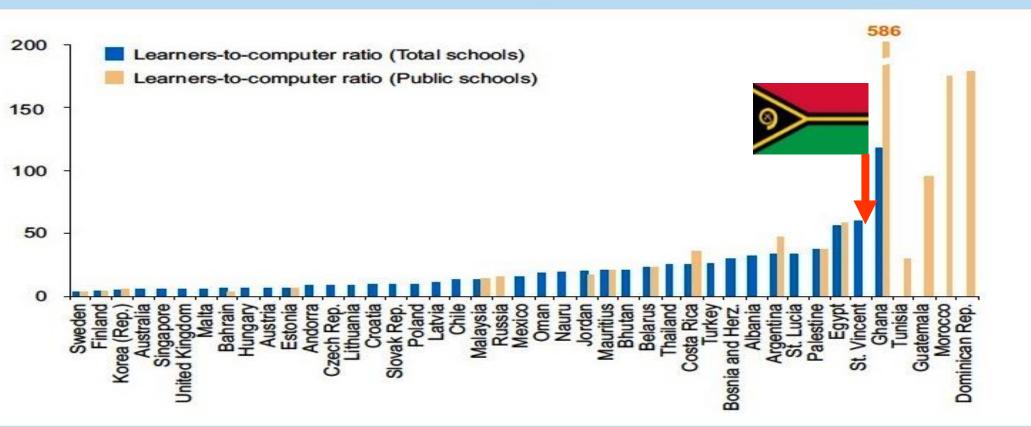
- About 6% of Vanuatu schools have Internet access
- 5% of students have Internet access at school
- 14<sup>th</sup> percentile of 48 countries reporting to ITU



## 205 school students compete for each computer

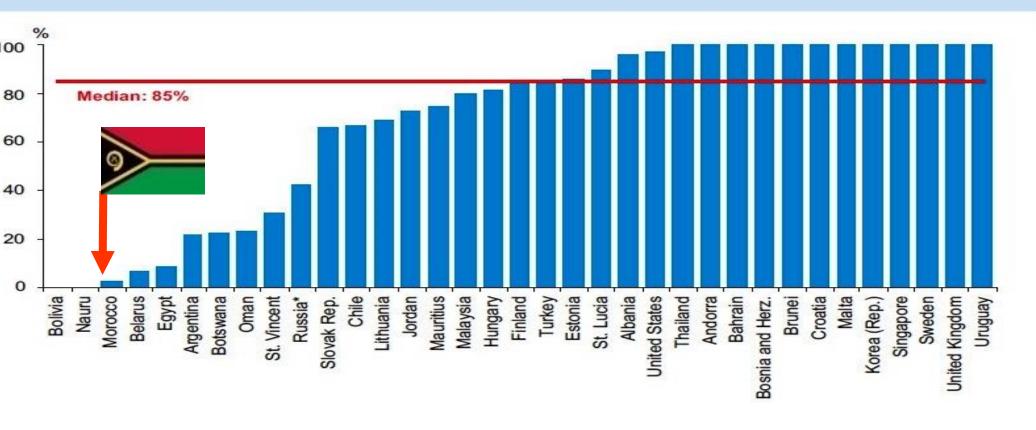
- Vanuatu students to computer ratio:
   205 students per computer; only about
   300 computers for 70,000 students
- 4th percentile of countries reporting
- Thus 96% of countries are doing better





#### Only 1% of Vanuatu schools have broadband access...

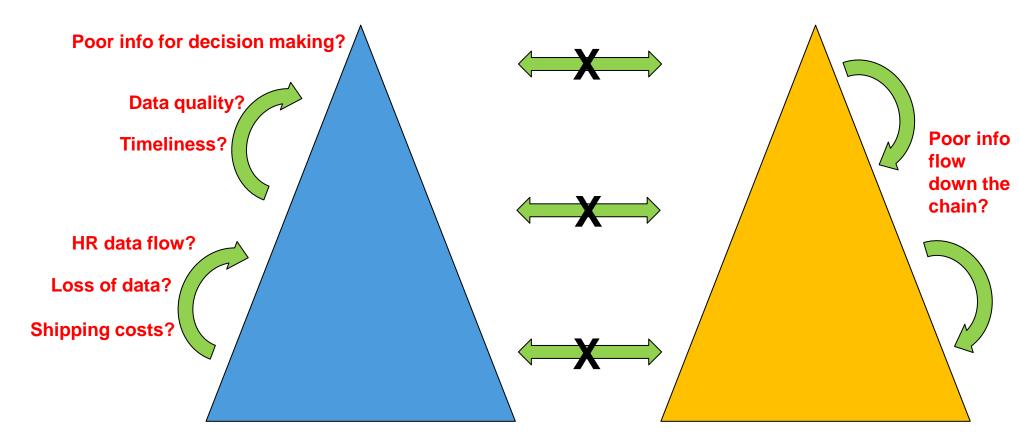
2.5: Proportion of schools with broadband Internet access (for ISCED levels 1-3), 2008-09\*\*



...3<sup>rd</sup> percentile in world



### Information flow up and down many Ministries is poor, and across Ministries is often non-existent...



...and communication with the public is very limited



# Benefits of ICTs in Health & Education

### ICT-based public awareness campaigns can reduce NCDs...

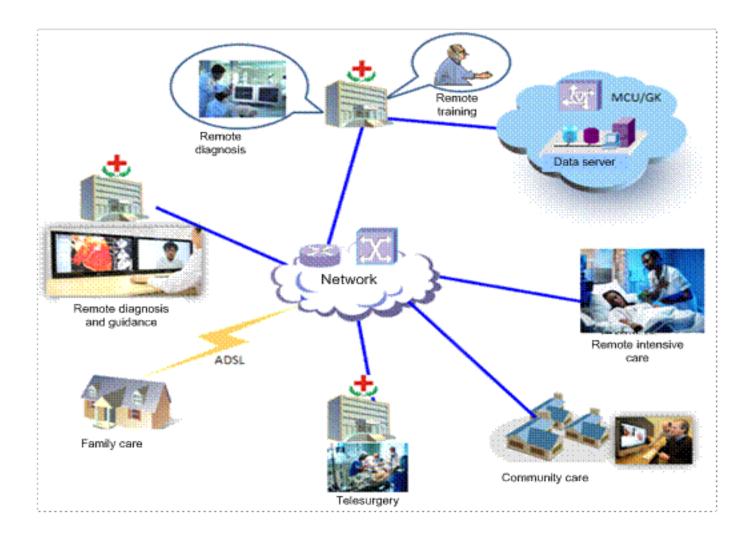






...result: a healthy life style

#### Telemedicine can bridge many gaps



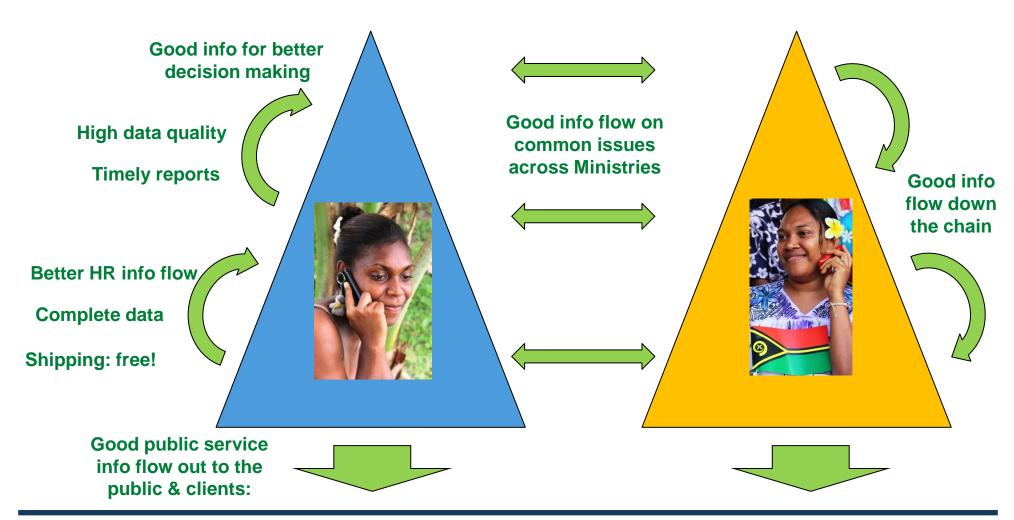
#### Student digital literacy is low but there is a plan:

Bad news: est. of computer literacy in schools: only 4%, almost all secondary students

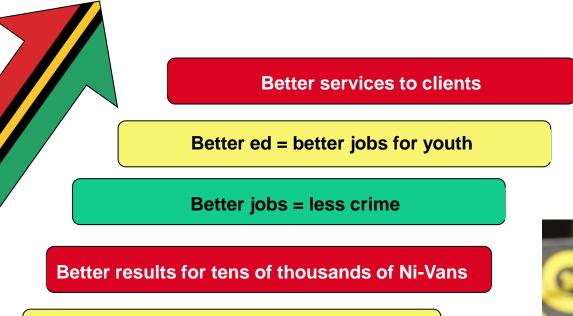
Good news: schools w/ computer labs have a 71% computer literacy rate, compared to almost zero w/ no lab



#### ICTs improve information flow and transparency



## ICTs improve health, education and employment, with good effects in the village, province and nation



Impacts at village level for ordinary people





# Recommended Actions & Budget

#### Recommended action items:

"Vision" + action plan

**Business case** 



Old & new \$\$: Aus, NZ, WB, ADB, Middle East, BRICS

MOE

### **Action Requires Funds**

HEALTH	<u>USD</u>	VATU (millions)
Broadband Connectivity, ALL Hospitals, Clinics, Dispensaries, Provincial Centers	\$6.0M	600 M
Health Information System +Training	\$6.5M	650 M
Public Health Promotion - Website, SMS, Radio	\$5.0 M	500 M
Telemedicine systems	\$5.0 M	500 M
TOTAL HEALTH	\$22.5M	2.250 Billion VT
EDUCATION		
Broadband Connectivity – All Schools, Provincial Centers	\$9.0 M	900 M
Education Information System, Teacher Training	\$5.5M	550M
Digital Content - Curriculum, Distance Learning, Non-English content	\$4.0 M	400 M
ICTs in Education Training Institute	\$3.0M	300 M
Village/Community Internet Access via Local Schools	\$2.0M	200 M
TOTAL EDUCATION	\$23.5 M	2.350 Billion VT



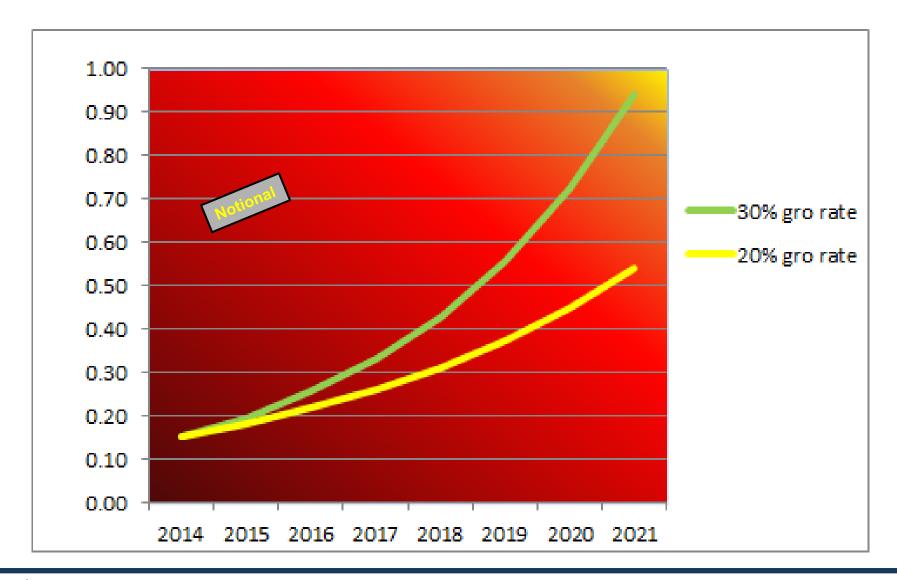


#### Let's remember who we are working for:





#### Fast smart phone rollout will have an impact



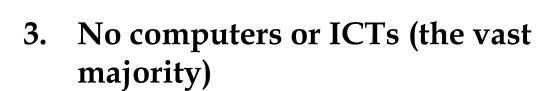
### Main obstacles to ICTs:

Response by Ed Officers on Obstacles	Percentage
Electrical power	<b>76</b>
HR, training, IT capacity	71
Internet access/coverage	48
Finances, sustainability	48
Maintenance	29
Remoteness	24
No computers	19

### Three types of schools:

1. A working computer lab for students, w/ average of 10 desktops, all secondary schools (about 20+ of these)





No schools had tablets, 1 had computers in the normal classroom

