



The Republic of the Union of Myanmar

Ministry of Transport



# Current Status on River Transport and Challenges in Myanmar



Presented by  
Inland Water  
Transport

7-3-2014

## BRIEF HISTORY

The Present IWT's forerunner was set up in **1865**. At that time the organization functioned as a private enterprise under the name of Irrawaddy Flotilla Company Limited (IFCL).



## Inland Water Transport (IWT)

- ❖ One of the state owned river transport enterprises under the Ministry of Transport,
- ❖ The main function is to carry out the transportation of passenger and commodity at low cost along the navigable waterways of Ayeyarwady River, Chindwin River, Delta area, Mon, Kayin and Rakhine States in Myanmar.
- ❖ Moreover, the bulky and heavy cargo transport is also carried out by its cargo fleet to provide the movement of export goods such as timber logs and to carry heavy imported equipment from Yangon port to upper Myanmar.



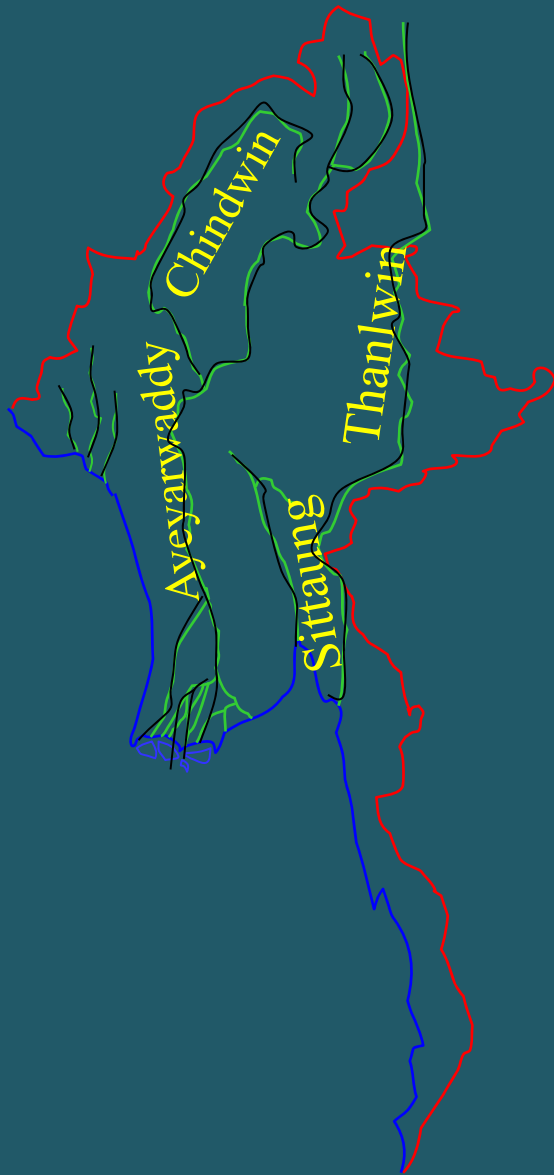


## Main Rivers in Myanmar

- 4 majors rivers
  - Ayeyarwaddy
  - Chindwin
  - Thanlwin
  - Sittaung
- Minor rivers in Ayeyarwaddy delta
- Minor rivers in Rakhine State
  - Kalatan
  - Lemyo
  - MayYu
  - Nath
- Minor rivers in Kayin and Mon State
  - Atatran
  - Gyne

## Commercially Navigable Length

Most of Myanmar Rivers are navigable. The rivers and their tributaries offer over 8000 kilometers commercial navigable waterways and other thousand of kilometers used by country boats for the principal mode of travel and transport. The most heavily used part of extensive waterways system is the Ayeyarwady River and its delta. The navigability lengths of inland waterways is summarized in the following table.



(a) The Ayeyarwady	1534
(b) The Chindwin	730
(c) The Ayeyarwady delta	2404
(d) The Thanlwin and Mon state rivers	380
(e) The Rakhine state rivers	1602
The Mekong (within Myanmar territory)	265
<b>Total</b>	<b>6915</b>

# ORGANIZATION

The Inland Water Transport, one of the State owned Transport Enterprises under the Ministry of Transport, is headed by the Managing Director who is responsible for the day to day management of the organization.

## Seven Departments of IWT

- ❖ Administration Department
- ❖ Passenger Transport Department
- ❖ Cargo Transport Department
- ❖ Marine Department
- ❖ Engineering Department
- ❖ Accounts Department
- ❖ Inspection Department

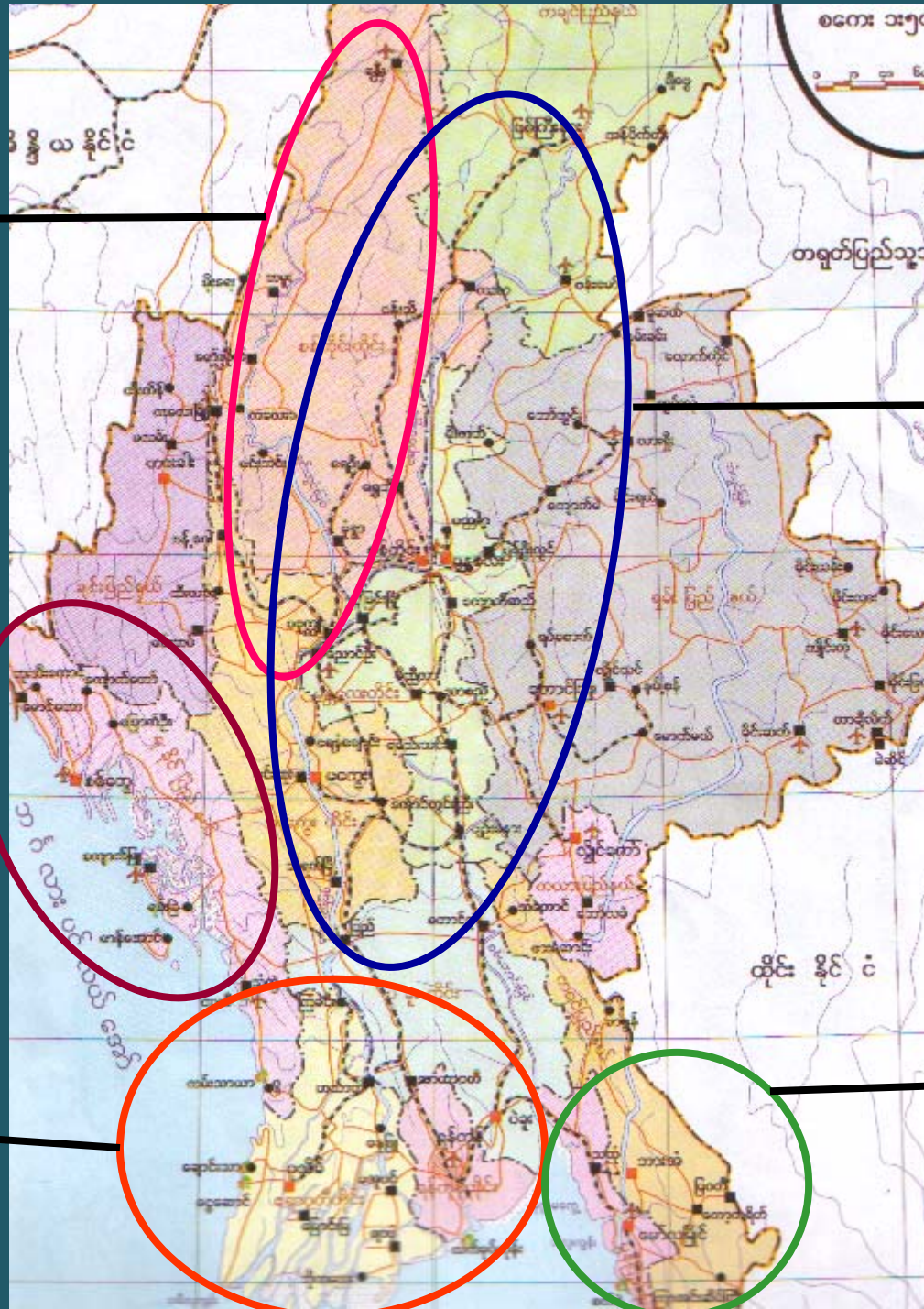
Chindwin  
Division

Rakhine  
Division

Delta  
Division

Ayeyarwady  
Division

Thanlwin  
Division





# Strength of Establishment

The IWT carries out day to day operations by utilizing it's minimum manpower and the following data describe the comparative statement of sanctioned strength and appointed personnel as at 28.2.2014.

	Sanctioned	Appointed
<b>Officers</b>	273	174
<b>Staff</b>	10666	3301
<b>Total</b>	<b>10939</b>	<b>3475</b>



# FLEET COMPOSITION AS AT (28.2.2014)

Powered Craft	225
Dumb barges	149
Station Pontoons	39
Total	413



# Fleet Composition of the I.W.T

<b>(a) Powered Vessels</b>	<b>225</b>
(1) Passenger Cum Cargo	138
(2) Cargo	27
(3) Powered Barge	30
(4) Water Tender	1
(5) Tug	22
(6) Oil Tanker	1
(7) Miscellaneous	6
<b>(b) Non-Powered Vessels</b>	<b>188</b>
(1) Cargo Barge	138
(2) Oil Barge	11
<b>(c) Station Pontoons</b>	<b>39</b>
<b>Total</b>	<b>413</b>

# Passenger cum Cargo services



# Cargo services





# Towing Vessel



# Tourism Vessel



# River Cruise Vessel



# Cargo Barge





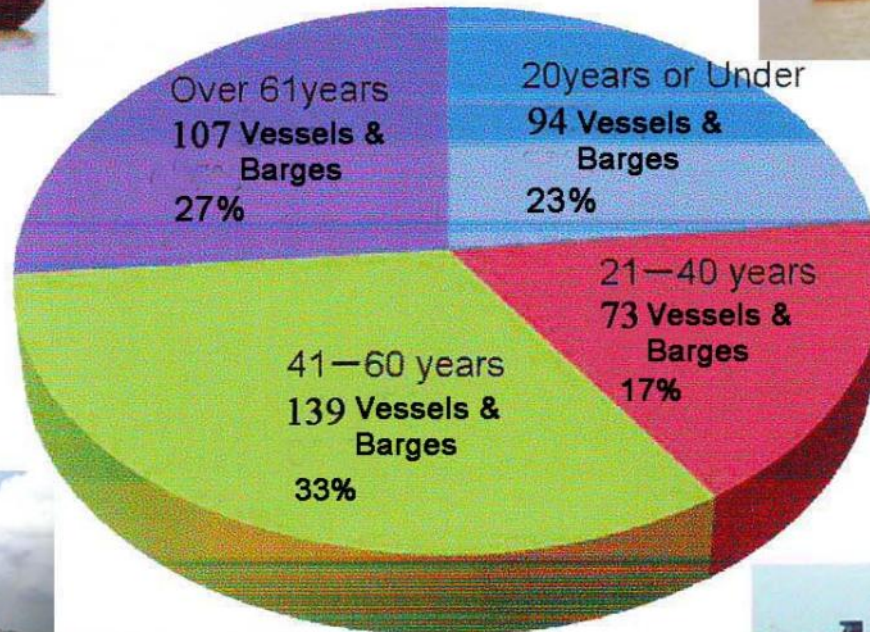
# Age of IWT Vessels



← Barge (Built in 1957)



← Ferry Built in 1955. Provided by Japan.



← Pusher Tug (Built in 1956)  
Constructed in England



← Ferry (Built in 1945. This ship will be replaced in **Nov: 2014** by Japanese Grant Aid)

## Calling Stations

The Inland Water Transport has 235 Calling Stations at the revering towns, villages and Delta Area

No.	Regeion	No of Calling Station
1	Delta	114
2	Ayeyarwaddy	57
3	Chindwin	16
4	Thanlwin(Atatran, Gyne)	28
5	Rakhine (Kaladon, Lemyo, May Yu)	20
	<b>Total</b>	<b>235</b>

## Passenger cum Cargo services

There are 6 operation divisions namely Delta, Ayeyarwady, Chindwin, Thanlwin, Rakhine and Cargo division to carry out smooth and secure transportation of passenger and cargo by IWT's fleet.

Sr.	Division	Express	ordinary	Ferry	Hire	Total
1	Delta	7	1	5	2	15
2	Ayeyarwady	7	-	-	-	7
3	Chindwin	3	-	-	-	3
4	Thanlwin	-	3	1	-	4
5	Rakhine	3	-	-	1	4
6	Cargo	-	-	-	-	-
	<b>Total</b>	<b>20</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>33</b>

# Passenger cum Cargo services

The new road and bridges are now constructed and transport network were developed through the whole country. So that some inland water way transport routes closed and some trip are reduced.

NO	Division	Service Routes			
		2001-02	2010-11	2012-13	2013-14
1	Delta	25	22	18	15
2	Ayeyarwady	11	8	8	7
3	Chindwin	5	4	3	3
4	Thanlwin	9	11	4	4
5	Rakhine	13	7	4	4
6	Cargo	1	1	1	-
	<b>Total</b>	<b>64</b>	<b>53</b>	<b>38</b>	<b>33</b>



# Static Capacity

The static capacity of all the I.W.T vessels and barges are as follows:

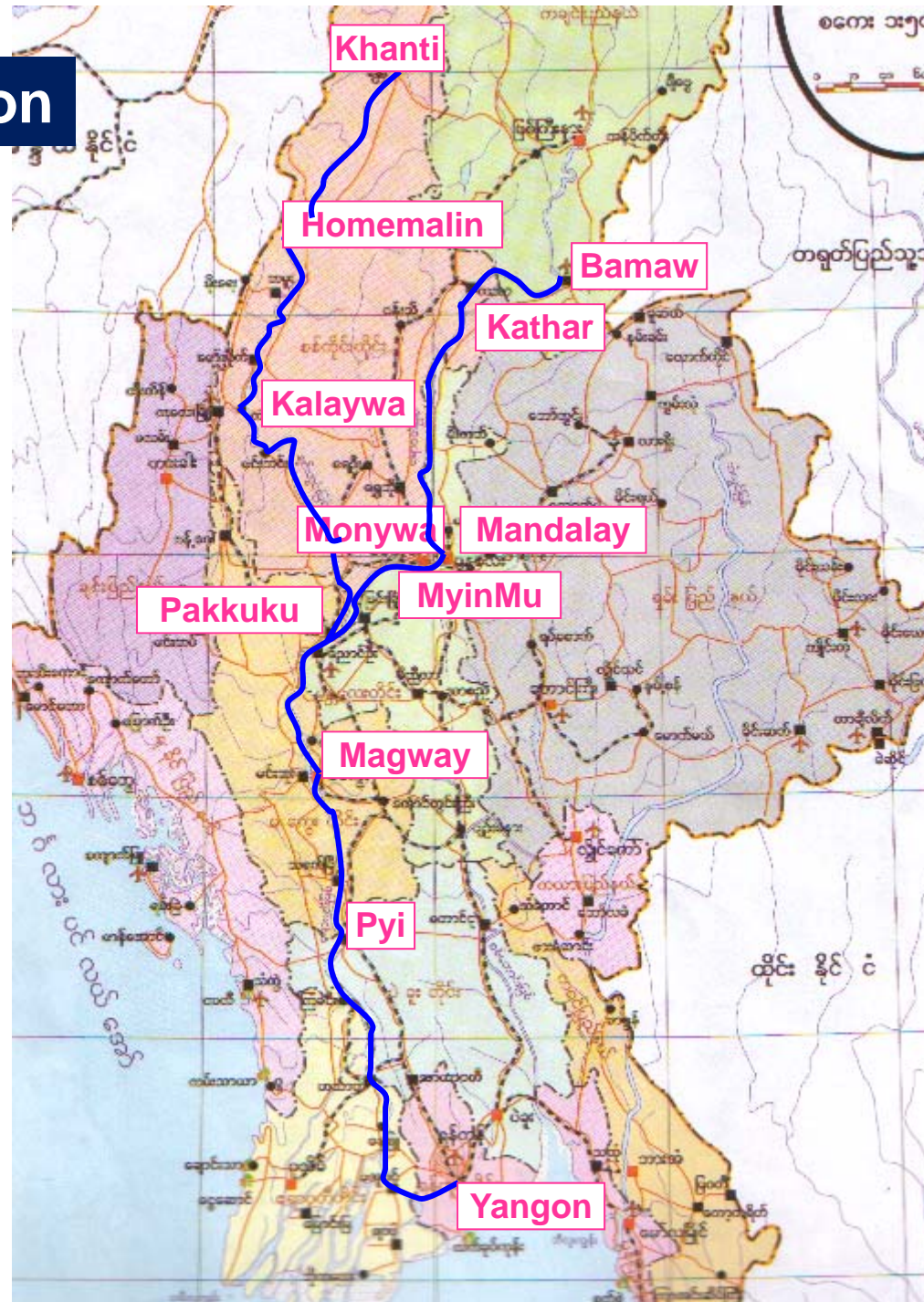
(a) Cargo Tons                      66050



(b) Passengers.  
(1) Short haul                      53666  
(2) Long haul                      36271



# Cargo Division



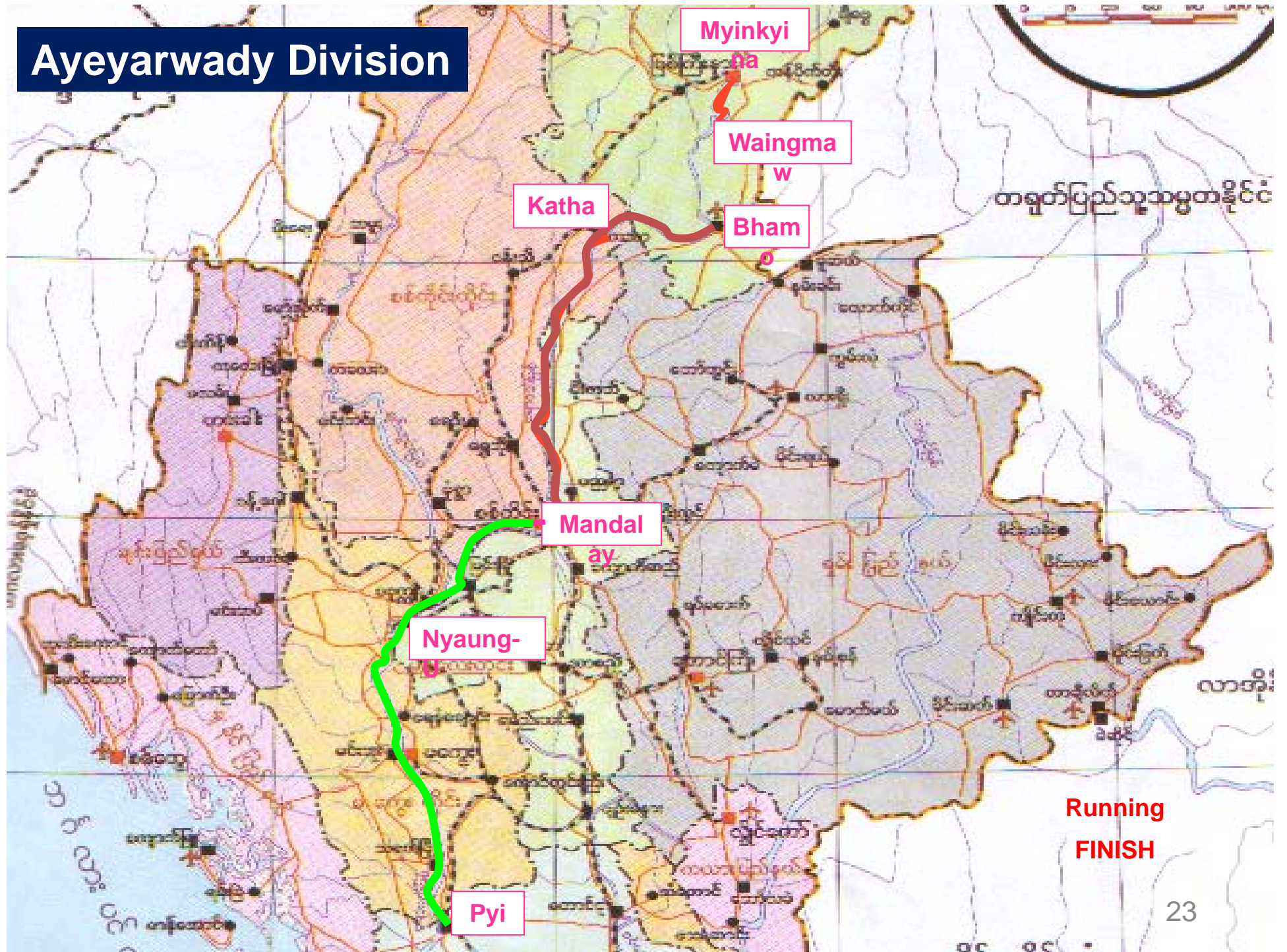
Running  
FINISH



# Delta Division

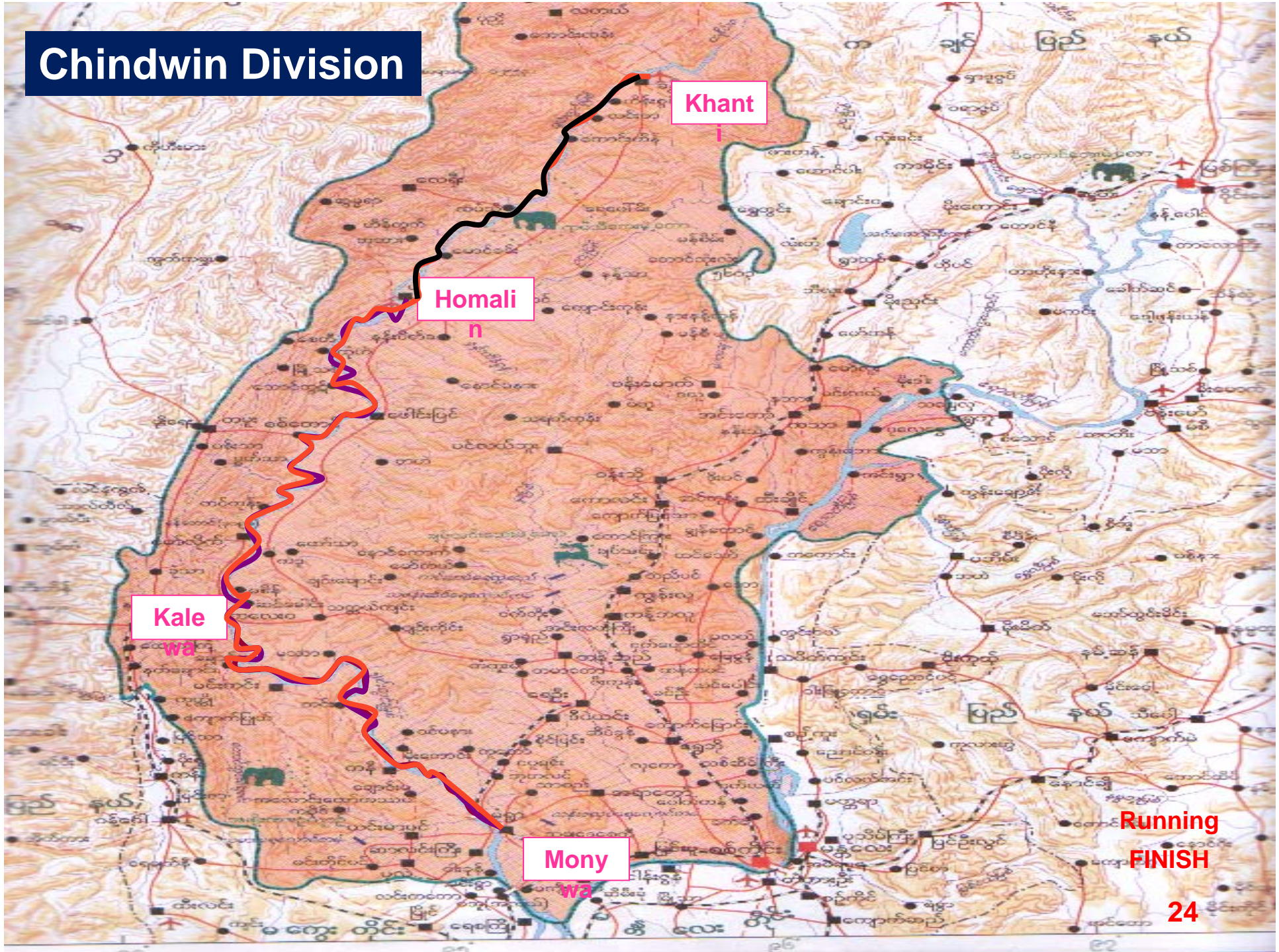


# Ayeyarwady Division





# Chindwin Division



Khant

Homalin

Kalewa

Monywa

Running  
FINISH



# Thanlwin Division



Running  
FINISH

# Rakhine Division

Buthita  
ung

Palat  
wa

Kyaukt  
aw

Myauk

Sittwe

Myaypone

Kyaukphyu

Man Aung

Taungkyut

Running  
FINISH





# Performance of IWT

IWT is endeavoring to support the improvement of transport sector in Myanmar and has been achieved the annual plans lay down by the Ministry of Transport. The performances of annual plans are shown in the following statistics.

In million

Fiscal Year	Passenger	Passenger* Mile	Ton	Ton*Mile
1999-2000	22.62	453.52	3.65	340.81
2000-2001	23.27	457.23	3.86	344.38
2001-2002	23.94	474.57	4.03	355.11
2002-2003	24.20	487.03	4.17	370.87
2003-2004	24.25	480.77	4.19	427.15
2004-2005	24.71	516.33	4.30	453.35
2005-2006	25.34	588.83	4.26	455.17
2006-2007	26.32	654.78	4.28	519.98
2007-2008	26.88	720.67	4.47	581.84
2008-2009	27.41	783.48	4.65	639.44
2009-2010	27.11	820.22	4.68	687.20
2010-2011	27.56	920.21	4.79	753.69
2011-2012	19.30	531.27	3.35	519.88
2012-2013	15.02	210.10	2.12	332.00
2013-2014 (Apr-Jan)	11.18	126.74	1.59	235.015



# DOCKYARDS AND CAPACITY

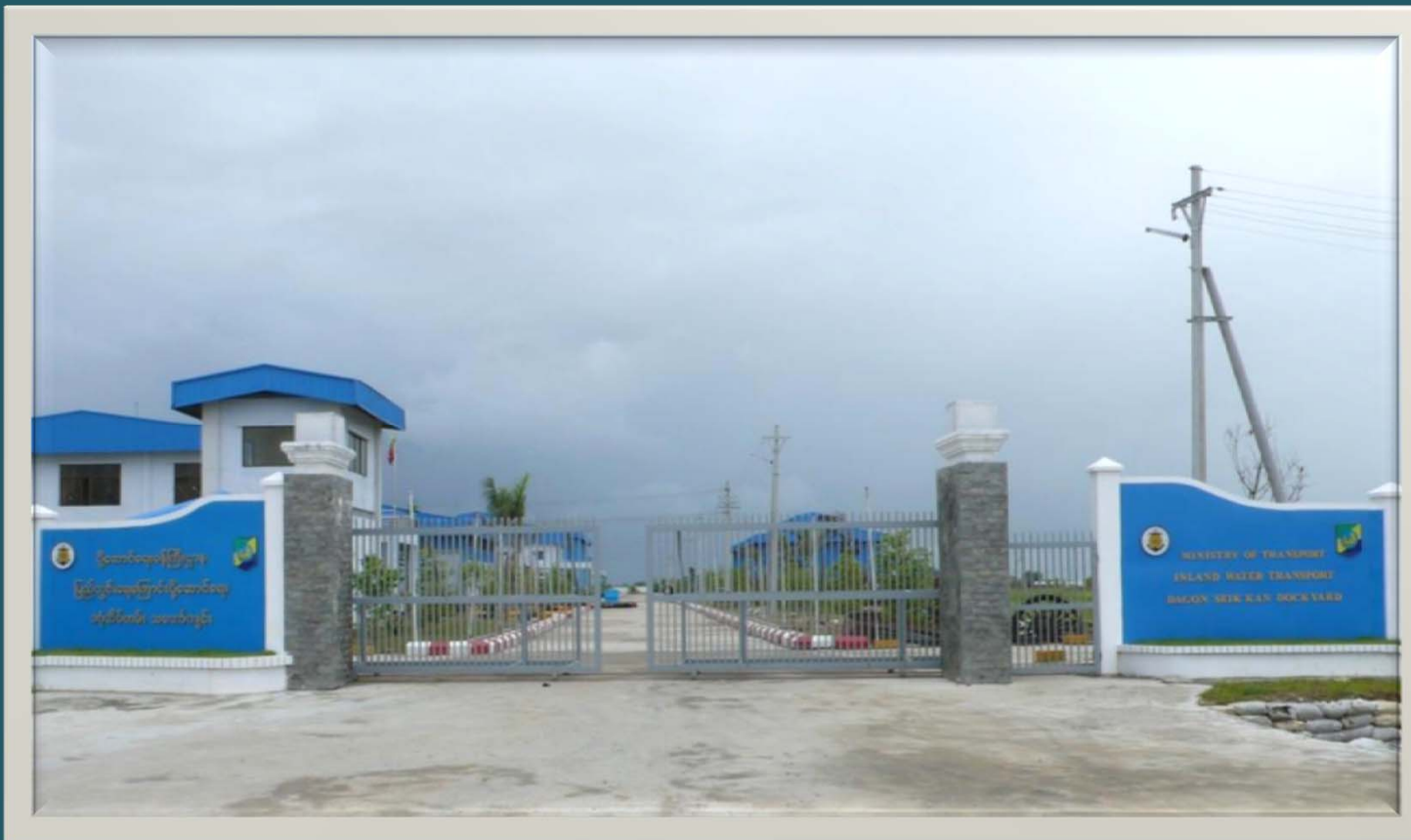
Dockyards	Location	No. of Slipway			Docking Capacity	Maximum DWT For Docking
		Main Slipway	Side Slipway	Air Bag Way		
Dalla Dockyard	Dalla	14	-	-	22	1400
Dagon Seik Kan Dockyard	Dagon Seik Kan	2	5	1	26	1400
Sittway Dockyard	Sittway	1	2	-	5	250
Than lwin Dockyard	Mottama	1	-	-	2	300
Mandalay Dockyard	Mandalay	1	-	-	5	300
Chindwin Dockyard	Monywa	1	1	-	3	250
<b>Total</b>		<b>20</b>	<b>8</b>	<b>1</b>	<b>63</b>	<b>-</b>

# Dala Dockyard



(1)	Location	Dalla Township
(2)	Area	30 acres
(3)	Year established	1852
(4)	No. of slipway	14 slipways
(5)	Maximum docking for one time	41 vessels

# Dagon SeikKan Dockyard



- |                                  |                        |
|----------------------------------|------------------------|
| (1) Location                     | Dagon SeikKan Township |
| (2) Area                         | 44.576 acres           |
| (3) Year established             | 2013                   |
| (4) No. of slipway               | 8 slipways             |
| (5) Maximum docking for one time | 26 vessels             |



# Yatanarbon Dockyard



- |                                  |   |
|----------------------------------|---|
| (1) Location                     | No.(365) 41 <sup>th</sup> Street Mahaangmay Township, Mandalay. |
| (2) Area                         | 12.11 acres   |
| (3) Year established             | 1864  |
| (4) No. of slipway               | 1 slipway   |
| (5) Maximum docking for one time | 5 vessels   |



# Chindwin Dockyard



- |                                  |                                  |
|----------------------------------|----------------------------------|
| (1) Location                     | - Strand street, Monywa Township |
| (2) Area                         | - 6 acres                        |
| (3) Year established             | - 2005                           |
| (4) No. of slipway               | - 1 slipway                      |
| (5) Maximum docking for one time | - 3 vessels                      |

# Sittwe Dockyard



(1) Location	Sintku Street Sittwe
(2) Area	5.38 acres
(3) Year established	1900
(4) No. of slipway	1 slipway
(5) Maximum docking for one time	5 vessels

# Existing Dockyard Facilities



# Dala Dockyard





## The important role of inland waterway transport in Myanmar

- ❖ Among the various modes of transportations, Inland Water Transport is mode that has special advantages.
  - ❖ For transport of bulk cargoes barges and river boats have the advantages of large capacity.
  - ❖ High productively and low fuel consumption.
  - ❖ The physical size and weight of large and heavy cargo units transported by waterways is virtually unlimited.
  - ❖ Most of races are home to the basins of respective river systems.
  - ❖ IWT is found to be cheaper than other modes of cargo transport.
  - ❖ Cargo transport operating cost figures reveal that IWT is about five times cheaper than road transport and about two times less so than rail transport.
  - ❖ It is often the only means of transportation and communication in some parts of the country.
- ❖ Therefore, IWT is very essential not only for the economic development of the country but also for the welfare of the people living in isolated communications and remote areas.
- ❖ Traditionally, IWT has been the most important means of transport.

# DIFFICULTIES



## Ports Facilities Loading & Unloading





## Passenger Cum Cargo Transport Operation



## River Port Operation



## Manual Port Operation



## Manual Port Operation



# Ro - Ro Operation

# Gangplank



# Gangplank

# Gangplank





# Pontoon - Gangways



Pontoon - Gangways with Jetty



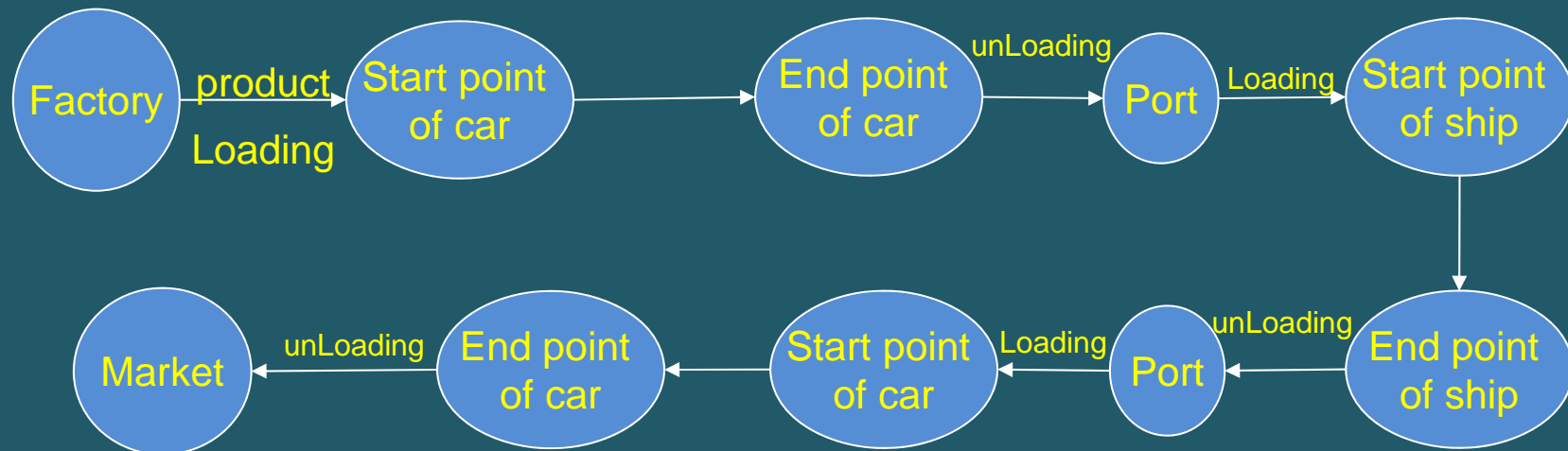
Cargo Loading



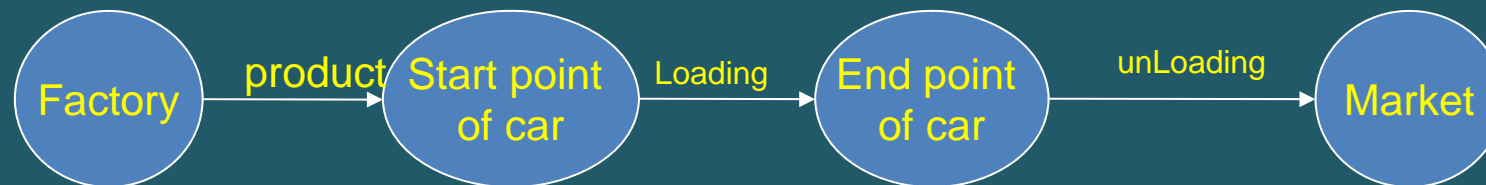


IWT, Which is a low-cost, energy efficient and environmentally friendly mode of transport. So, IWT is more cheaper than other mode such as rail, road, Air transport, But, IWT mode have faced more step than other modes and more expense in handling charges.

## IWT



## Road

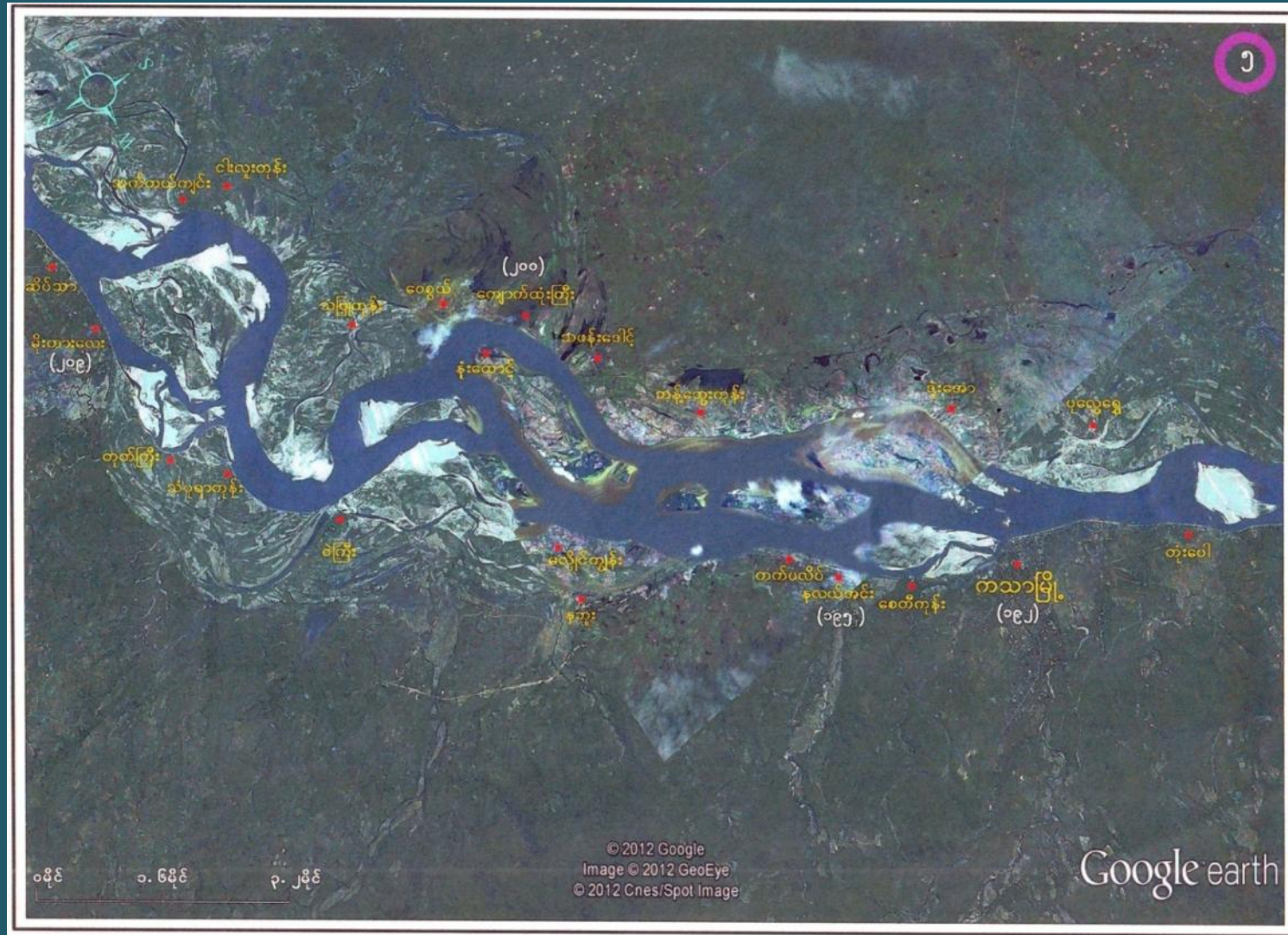


# Shallow Water in the Ayeyarwady in low water season



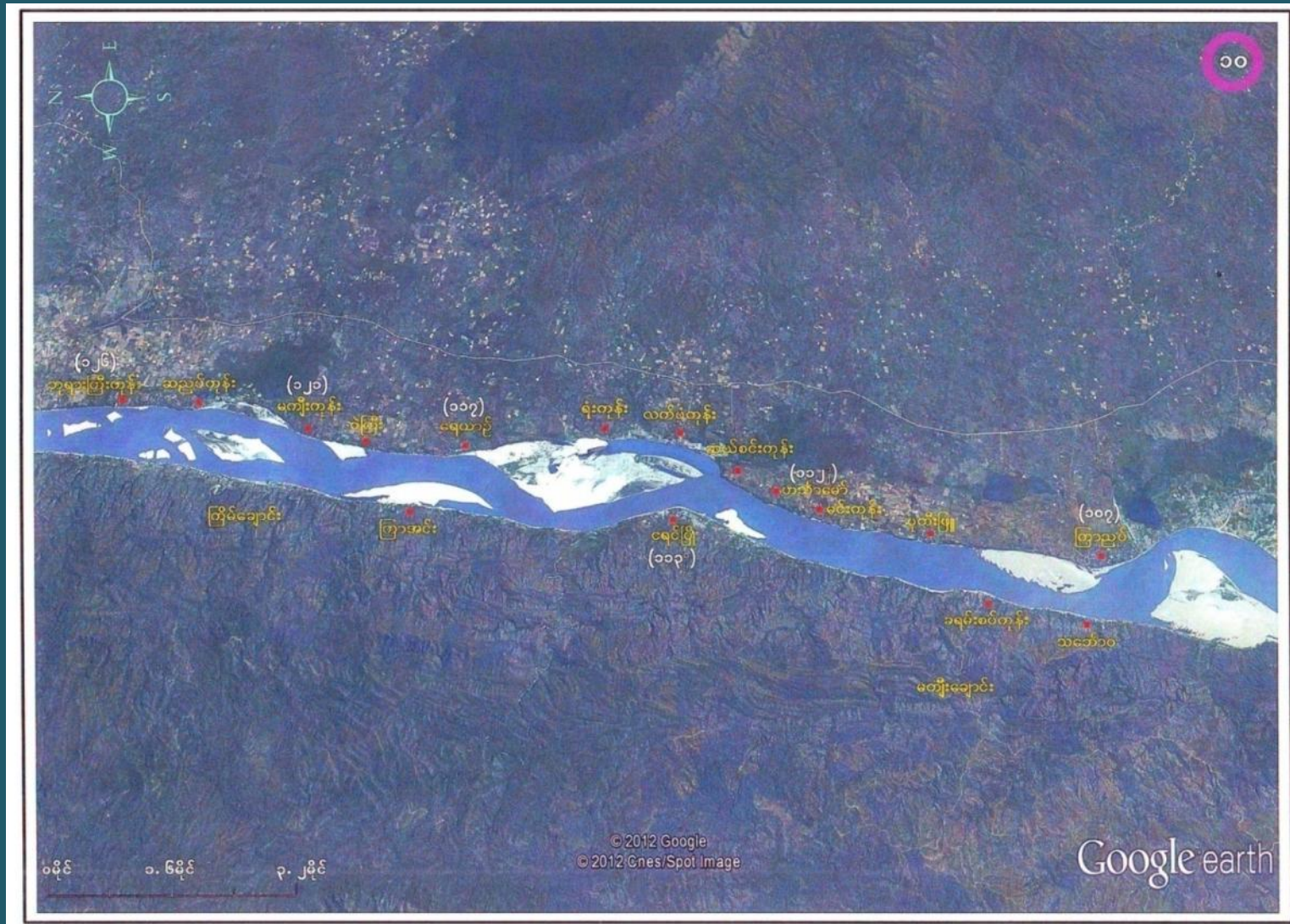


# Shallow Water in the Ayeyarwady in low water season





# Shallow Water in the Ayeyarwady in low water season





# Shallow Water in the Ayeyarwady in low water season









# A Grounded Vessel Being Recovered



# A Grounded Barge



# DWIR WORK BOAT MARKING THE NAVIGABLE CHANNEL ASHORE AND AFLOAT





# A Snag Being Removed in the Chandwin River





# CHALLENGES



# CURRENT STATUS ON IWT AND CHALLENGES

- ▶ The Government subsidy up to 2011-2012.
- ▶ The policy change for SOEs to stand on their own feet.
- ▶ IWT has old and obsolete fleet .
- ▶ Need to invest new and modern ships .
- ▶ To introduce containerization for cargo transport.
- ▶ To make suitable inland port facilities for loading and unloading.
- ▶ Insufficient budget to invest.
- ▶ Looking for partner for J.V.



- ▶ Old vessels - low speed
- ▶ Old dockyard & facilities
- ▶ Shallow depth of navigable waterways
- ▶ Insufficient navigational marks on ashore & afloat
- ▶ High cost of fuel
- ▶ Bridges across the rivers
- ▶ Decrease of cargo flow

# Bridges across the River

	Clearance Span	Clearance Height
<b>Sinbyushin Bridge (Chindwin)</b>	<b>230'</b>	<b>36' 3"</b>
<b>Chindwin Bridge (Monywa)</b>	<b>300'</b>	<b>40'</b>
<b>Inwa Bridge (Sagaing)</b>	<b>360'</b>	<b>40'</b>
<b>Anawyahta Bridge (Chauk)</b>	<b>328'</b>	<b>56'</b>
<b>Ayeyarwaddy Bridge (Pyay)</b>	<b>299'</b>	<b>57'</b>
<b>Nawaday Bridge (Pyay)</b>	<b>328'</b>	<b>56'</b>
<b>BoMyatHtun Bridge (Nyaungdon)</b>	<b>328'</b>	<b>56'</b>
<b>Maubin Bridge</b>	<b>363'</b>	<b>56'</b>
<b>Bayinnaung Bridge</b>	<b>330'</b>	<b>36' 6"</b>
<b>Thanlyin Bridge</b>	<b>348'</b>	<b>33' 6"</b>
<b>Aungzayya Bridge (Insein)</b>	<b>813'</b>	<b>39'</b>

# Bridges across the River (Delta Region)

	Clearance Span	Clearance Height
Shwebyitha Bridge	358'	39'
Mahabandoola Bridge (Tharkayta)	338'	33'
Wakema Bridge	580'	45'
Shwe Laung Bridge	400'	36'
Myaungmya Bridge	360'	56'
Gonnyindan Bridge	71'	36'
Thanlwin Bridge (Puan)	363'	56'
Kispanadi Bridge	320'	49'
Maw La Myaing Bridge	328	46'



# Bridges across the River

	Clearance Span	Clearance Height
Balaminhtin(Myitkyina)	354'	20'
Yatanarbon (Sagaing)	735'	40'
Inwa Bridge (Sagaing)	360'	40'
Anawyahta Bridge (Chauk)	328'	56'
Ayeyarwaddy Bridge (Magwe)	299'	57'
Ayeyarwaddy Bridge (Malon)	312' 6"	57'
Nawaday Bridge (Pyay)	328'	56'
BoMyatHtun Bridge (Nyaungdon)	328'	56'

# Container Port Plan (in Mandalay)



# DREDGING





# COOPERATION BETWEEN IWT & JICA



THE PROJECT FOR UPGRADING FERRYBOAT IN YANGON CITY  
IN THE REPUBLIC OF THE UNION OF MYANMAR





# WELCOME TO IWT





THANK YOU