Challenges of developing mass transit systems in developing countries
The Kochi Metro experience

UMI conference – Hyderabad

5th November 2017
A brief history of a successful partnership
Kochi: a vibrant city at the heart of Kerala

- Capital of the state of Kerala
- 2.1 million inhabitants
- City Mobility Plan elaborated in 2007 to improve the urban mobility and the transport services, and reduce congestion and pollution
A brief history of a successful partnership
Metro: the short term solution

- A MRTS with a route length of 25.6km with 22 elevated stations along a linear path that goes right through the center of the most congested roads in Kochi, total cost 651 M€

1. ALUVA - PETTA (PH-I) (25.612KM)
2. ALUVA - ANGAMALY (18.28M)
3. JLN STATION - INFO PARK VIA KAKKANAD (10.90KM)
4. PACHALAM/JOS JUNCTION - FORT KOCHI (19.8KM)
5. PETTA - TRIPUNITHURA (3.45KM)

**Legend**
- METRO LINE PHASE-I
- METRO LINE PHASE-II
A brief history of a successful partnership
A metro for Kochi but not only

- 2013: AFD provided a financial support to KMRL, through a loan accounting for 20% of the total amount of the Metro project.

- Willingness of KMRL to work on all the topics related to the smooth integration of the metro project into the urban fabric and to benefit from International expertise,

→ 2015: start of a technical cooperation, financed through AFD by funds provided by the French Government (800 K€) to work on:
  - The implementation of urban pilot projects
  - The definition of a strategy for maintenance and operations
  - The reduction of operations costs
  - The creation of a Unified Metropolitan Transport Authority
A brief history of a successful partnership

The partners

### INSTITUTIONAL PARTNERS
- Kochi Metro Rail Limited (KMRL)
- AFD, French Agency for development
- SYTRAL (transport authority of the French city Lyon)

### Consulting companies
- Des villes et des Hommes (DVDH)
- EGIS / ADE Transport
- French Metro designers and operators (Keolys, Transdev, …)

### Coordinator
- Codatu, French association whose aim is to stimulate the exchange of knowledge and know-how to promote the implementation of sustainable urban mobility policies in developing countries.
- One representative was full time present in Kochi
The lessons learnt from this partnership:
5 core values

- The cooperation in practice
  - One person from CODATU full time in Kochi
  - Quarterly brainstorming workshops and yearly study tours
  - Brainstorming sessions gathering the variety of stakeholders involved
  - A project oriented approach

- A way for KMRL to progressively develop its own innovative concepts and proposals, well adapted to the territory and culture of the people of Kerala

- An actual contribution that could seem minimal but that contribute in planting quick-germinating seeds which are already growing and can be seen in the urban projects and in the various initiatives taken to ensure intermodal integration

→ #1- Take the best out of international cooperation
The lessons learnt from this partnership: 5 core values

- Kochi, commercial capital of Kerala, most vibrant agglomeration in the state

- Kerala Territory and culture taken as a major source of inspiration, reflected in the design and implementation of the project

→ #2 - Take your inspiration and strength from your own territory and culture
The lessons learnt from this partnership:

2/5: Inspiration

- What is so special about Kochi Metro?
  - A willingness to prove that any project can be qualitative, sustainable and implemented without corruption (Quick-wins)
  - The development of a flat organization, promoting cross-cutting collaboration within the staff and creating internal dynamism
  - A powerful communication strategy
  - A social resonance (promotion of gender parity, transgender community)
  - A WILLINGNESS TO DO MORE THAN A METRO

→ #3 - Create a bold and inspiring mindset for your teamwork
The lessons learnt from this partnership: 5 core values

- Be **Users oriented** and not output oriented
- Provide sustainable urban transport **solutions** and not a transport technology
- Do “more than a metro”: Include **all existing modes** of public transport in the reflection process, to create an accessible and integrated network for all citizens.
- KMRL Project motto: Implement “One network, One fare, One timetable”

→ #4 - Design a seamless integrated public transport system

Exemple in Kochi: re-use of Water Transport (EUR 100 Million),
- 16 routes,
- 78 modern ferries,
- around 38 jetties,
- serving 10 islands,
- Commissioning by the year 2018.
The lessons learnt from this partnership:
5 core values

- A mobility project = an opportunity to transform the city and its infrastructures, to create a more inclusive and pedestrian-friendly city.

- Importance of the development of **open spaces, walkways and cycle-tracks**, to ensure an equitable sharing of the public space among the citizens of Kochi, whether they are car users, pedestrians or cyclists;

- Preparation of a **Master Plan** for NMT in Kochi
- **Pilot project**: Panampilly Nagar, a residential area whose vacant land was transformed into a 750-meterlong walkway cum cycle-track.

- **Open Street days**

→ #5 - Rethink the use of public spaces
The lessons learnt from this partnership:

3/5: Integration

- **Institutional integration** to facilitate coordinated planning and manage integrated urban transport systems.

- KMRL committed to initiate the creation of UMTA, necessary to implement the vision “One Network, One Fare, One Timetable”.

- Institutional integration is essential to provide an efficient mobility service to the citizens, through an integration and interconnection of all modes of public transport in the city.

→ #6 – Gather all forces under the common umbrella of an UMTA
The lessons learnt from this partnership: 5 core values

4/5: Innovation

- **Kochi One Card**: EMV-based smart-card, unique PPP Model
  - Agreement with AXIS Bank – investment from the bank (AFC), maintenance over 10 years
  - Royalty paid to KMRL for the right to be partner
  - Co-branded credit card
  - Revolution for AFC systems in the metro industry

- **Kochi One Mobile App**: Journey Planner + Generation of QR code tickets for travel + payment of utility bills + information on the city services and city life
  - Joint Project of CSML and KMRL (Smart-city national scheme)

→ #7 – Get the best out of Intelligent Transport System
The lessons learnt from this partnership:

- Promotion of cross-cutting collaboration
  - Weekly « Vertical Meetings » (brainstorming sessions)
- Balance recruitment of men and women + recruitment of a women-empowerment organisation
- KMRL Green initiative

→ #8 – Rely on societal and managerial innovations
Financements de projets portuaires en PPP

AGENCE FRANÇAISE DE DÉVELOPPEMENT
The lessons learnt from this partnership:
5 core values

- An efficient Communication Strategy

→ #9 – Take full advantage of a professional communication
For further information:

→ The Kochi Metro Experience: a valuable contribution to the history of Indian metros, July 2017 (CODATU website)

→ Video: Kochi, much more than a metro (Youtube)
THANK YOU