



MAJOR INVESTMENTS IN SUSTAINABLE MOBILITY IN CASABLANCA AND RABAT



- RABAT-SALÉ (2 M. inhab.): a backbone link between neighbouring cities with contrasting socio economic features
 - Two lines (17 km) commissioned in 2011; ongoing extension (7km); operator Transdev
 - Construction cost: 500 million €,
 - Daily ridership: ~110,000 pax (pre COVID)



- CASABLANCA (>4 M. inhab.): 1st line of future larger a 4-line network (+ 2 BRT lines).
 - Line 1 (31 km) commissioned in 2012, line 2 in 2019; line 3 & 4 under construction; operator RATP Dev Casa
 - Total cost :>1,000 million €
 - Daily ridership: line T1 ~120,000 pax (pre COVID)

WHY AN EX POST EVALUATION?

"Do tramways live up to their promises in terms of sustainable development goals e.g. well-being, gender questions, climate change or sustainable cities?"

Casablanca and Rabat-Salé are showcases

- Growing metropolises
- Important role of taxis & informal modes to compensate for a failed bus system in both cities
- Both tramways inaugurated ~ 10 years ago







APPROACH: CONTRIBUTION ANALYSIS

- Evaluative approach: Contribution analysis:
 - What happened? Description of patterns of change in 28 change areas (incl. mobility, urban landscape and planning, society, economy, environment)
 - What are the main drivers to these changes?
 - How is the tramway complementing or facing these drivers?

Methods:

- Contribution of 4 Moroccan experts
- 30 stakeholder interviews
- Participatory workshops on change areas to assess
- Literature review on the impacts of tramways
- 1,600 users surveyed incl. 200 in depth
- interviews with 235 residents next to stations: women, persons with disabilities and special needs, students, new residents (incl. non / occasional users)
- interviews with 165 businesses and administrations



BOTH TRAMWAYS FOUND THEIR AUDIENCE

	Tram share (2014) (in catchment area)	
	work trips	education trips
Rabat	10%	29%
Salé	25%	35%
Casa- blanca	13%	13%

- Limited gains in terms of accessibility to jobs & amenities due to taxis
- Still minor role at metropolitan level... but significant modal share in their catchment area
- Similar patterns in both cities:
 - Core users (~30-40,000 people take the tram every day)
 - Halo of occasional users by a large share of the population –
 in Casablanca, only 1/3 of the population never took the
 tram

GENDER CONTEXT

- This evaluation opted for a "gender lens". However, gender equality was not an objective (AFD Gender strategy: 2014)
- Initial statement about women in Morocco:
 - → Women have less paid job than men (22% vs. 70%, 2018), but equal share of students.
 - → Women tend to travel less than men (29% do not travel outside their neighbourhood vs. 8%, 2014).
 - → Women are less motorised and more dependent on walking and public transport.
 - Women are reluctant to use buses, which they judge unsafe and degrading



WOMEN ARE HEAVY TRAMWAY USERS

- ~50% of passengers in both cities are women!
- Women prefer tramway to go working: compared to men
 - → +70% in Casablanca,
 - +150% in Rabat Salé
 - They are prepared to walk more to reach a tramway stop.
 - The tramway replaces
 - → large taxis (reduction of 10 percentage points)
 - car as passenger (-9 pp)
 - → bus (-7 pp)
 - → ... but is also the initial mode for > a third of trips
- More occasional uses for more reasons (health, relatives, shopping, leisures...) in more new areas
- As a result, strong gender gap in modal share in the catchment area: 13,5% for women vs 7,5% for men (Casablanca)



KEY MECHANISMS EXPLAINING WOMEN'S TRAM USE

- Women appreciate ... level of service! 72% of users, included women, consider the tram a dignifying mode (vs bus and shared taxis). Aspects include:
 - →Women are particularly sensitive to safety measures with staff on board and at the stops
 - →Improved walkability + street lighting of the surroundings
 - →Affordability, regularity, comfort, safety enable a peaceful, fraud-free "bubble of living together"
- Paradoxically, women may bluntly acknowledge that they appreciate that poorest and marginalized people are kept away by the fare policy / staff in station / closed design of stations





MAKING ASSUMPTIONS ON WOMEN'S USE

1. Theories on transport use elaborated by researchers and policy stakeholders from developed countries

Own European perspective

Almost no studies in Moroccan context + Fast moving context

• From "The tramway is empowering women..." to "Moroccan Women are using the tramway in their own empowerment process". They do so not because it is the only mode, but because it provides them dignity and safety



GENDER LENS AS APPROACH TO IMPACT MECHANISMS

- Gender lens allows for better understanding of factors influencing tram use beyond price and travel time.
- Could be used ex ante for project design:
 - How to integrate into/with traditional assessment tools such as CBA?
 - Averaging bias vs gender gap
- Gender-specific approach OR High quality of service in developing countries too?
- Towards "Use by women" as a meta quality criterion for the quality of transport systems?



FUTURE CHALLENGES FROM GENDER PERSPECTIVE

 Now that new systems are in place, will women take the bus? But, big improvements in bus system underway during survey.

- →62% of users in Casablanca and 51% in Rabat-Salé refuse absolutely to take the bus
- Much greater potential for increasing accessibility to jobs and amenities
- → Key question of articulating transport modes in a unique mobility system.
- Will women buy and use cars in the future?
 - →Today the tram is attractive for women that are "car passengers"
 - → Making use of the "positive projection" in tram to delay and perhaps avoid buying a second car?



THE NEED FOR ADDITIONAL DATA

- Data broken down by sex available from the Moroccan High Planning Commission
- Need for data on experienced inequalities!
 - → Crime victims survey
 - →Studies on feeling of dignity
 - →Studies on non-mobile women
- Questions that prove to be hard to discuss in Moroccan society:
 - ⇒Elderly, disabled, poor women
 - →LGBT tram users

ExPost

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Évaluation ex post des impacts des tramways de Casablanca et de Rabat-Salé – 2020



Full report available here





