



# Yeksi Naa: A Sustainable and Integrated Supply Chain in Senegal

**Roberto Dal Bianco**  
Global Health Consultant

*On behalf of*

**Dr Annette Seck Ndiaye**

Director, PNA

**Dr Modibo Dicko**

Director IPM, IntraHealth



**IntraHealth**  
INTERNATIONAL  
Because Health Workers Save Lives.

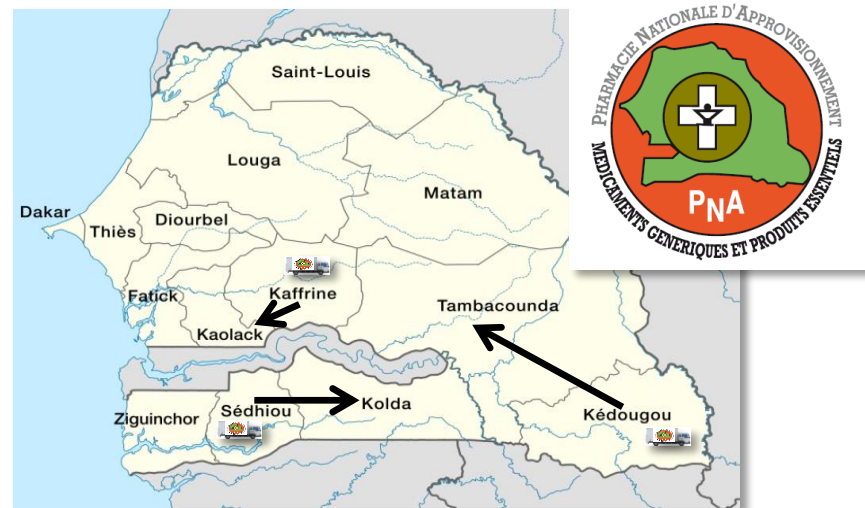




# Mission of the National Supply Pharmacy (PNA)

Assure the availability as well as the financial and geographic accessibility of quality generic medicines and essential products to the Senegalese population

11 regional warehouses  
+3 mobile warehouses  
cover 14 regions, 76  
districts, 89 health  
centres, >1,400 health  
posts



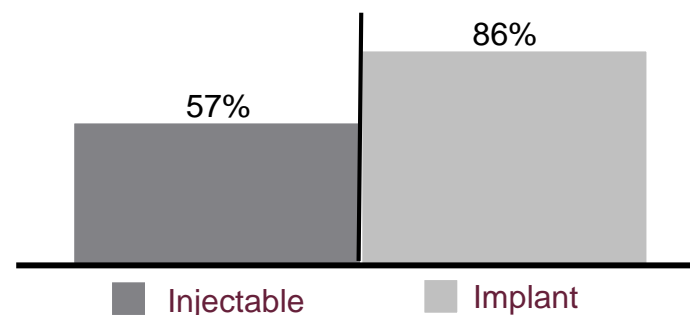
# Family Planning in Senegal in 2012

Frequent stockouts in public sector health facilities were limiting access to contraceptives in Senegal



Photo credit: IntraHealth International

Percentage of sampled health facilities with stockouts in Dakar region<sup>1</sup>



**>80%** of health facilities sampled had contraceptive stockouts

**12%** modern contraceptive prevalence rate

**~30%** unmet need for contraceptives

# Bottlenecks & Contributing Factors

## Why were stockouts occurring?

### Bottlenecks



**Commodity flow:** Health facilities were responsible for ordering and picking up commodities from district warehouses, but lacked resources



**Data flow:** Consumption data was not collated and reported, so accurate forecasting and restocking was not feasible



**Financial flow:** Health facilities were required to pay for commodities prior to consumption. Limited cash led to lack of procurement or prioritization of high margin commodities



**Lack of trained logistics:** System relied on facility healthcare workers to accurately forecast, manage, track, and order supplies, but they often lacked training, ownership, and time to oversee logistics



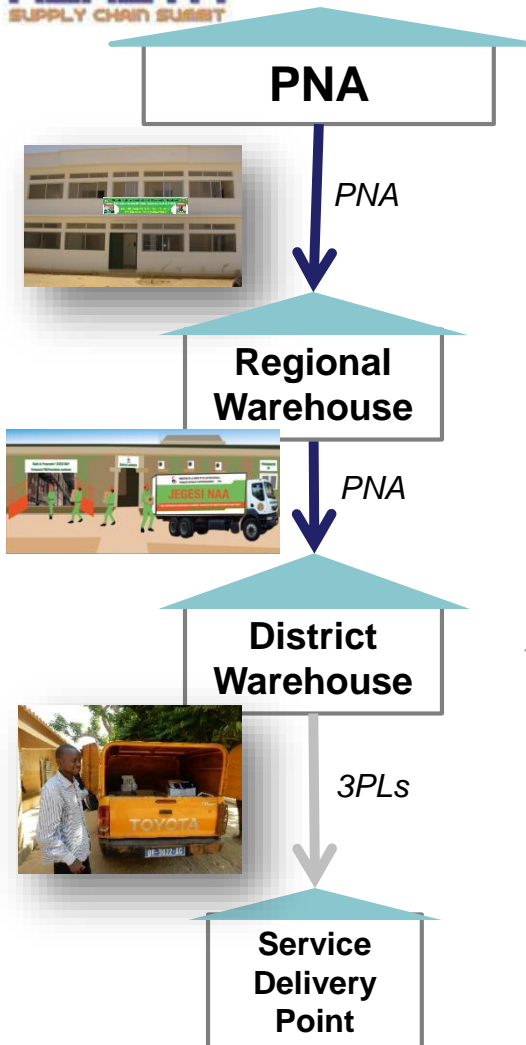
**Complex system:** Highly complex “pull-based” model with multiple parallel supply chains for essential commodities

### Contributing Factors



GLOBAL  
HEALTH  
SUPPLY CHAIN SUMMIT

# Collaboration: Yeksi Naa (“I have arrived”)



PNA & IntraHealth with support from MoH, the Bill & Melinda Gates Foundation, MSD for Mothers & other partners (USAID, UNFPA, etc.) are implementing nationwide:

## Jegesi Naa (i.e. “I get closer”)

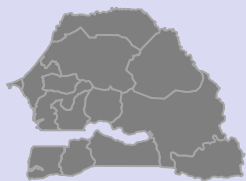
- ✓ Delivery by PNA of ~350 products (incl. FP, UN commodities & public health programs)
- ✓ Vendor Managed Inventory with cost recovery
- ✓ Sharing management costs by PNA & District

## Informed Push Model with 3PLs (IPM-3PL)

- ✓ **Commodity flow:** “Smart”, monthly delivery of contraceptives by third-party logistics providers directly to health facilities
- ✓ **Data flow:** Consumption data is collected on-site via tablet and transmitted in real-time to authorities
- ✓ **Financial flow:** Commodities are paid for by facilities after consumption

# Family Planning: Results to Date

## National Expansion



**All 14**

Regions in Senegal reached<sup>1</sup>



**1,400**

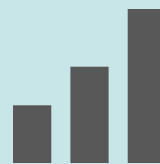
Health care facilities covered<sup>1</sup>

## Key Results



**<2%**

Health facilities experiencing contraceptive stockouts<sup>1</sup>



**↑8%**

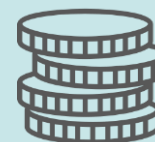
**points**

Increase in Modern Contraceptive Prevalence Rate<sup>2</sup>



**42%**

Increase in contraceptive consumption over 17 months of national scale up



**36%**

IPM-3PL 36% more cost-effective than insourced model for contraceptives<sup>3\*</sup>

1. IntraHealth International. *Expanding the Informed Push Model: Progress reports (Internal)*. Chapel Hill (NC): IntraHealth International/.

2. Agence Nationale de la Statistique et de la Démographie (ANSD). (2015). *Enquête Démographique et de Santé Continue au Sénégal (EDS-Continue) 2014*. Calverton (MD):ICF International.

3. Dal Bianco R. *IPM cost-effectiveness of private vs public sector distribution*. Presented at: *International Conference on Family Planning; 2016 Jan 27; Nusa Dua, Bali*.

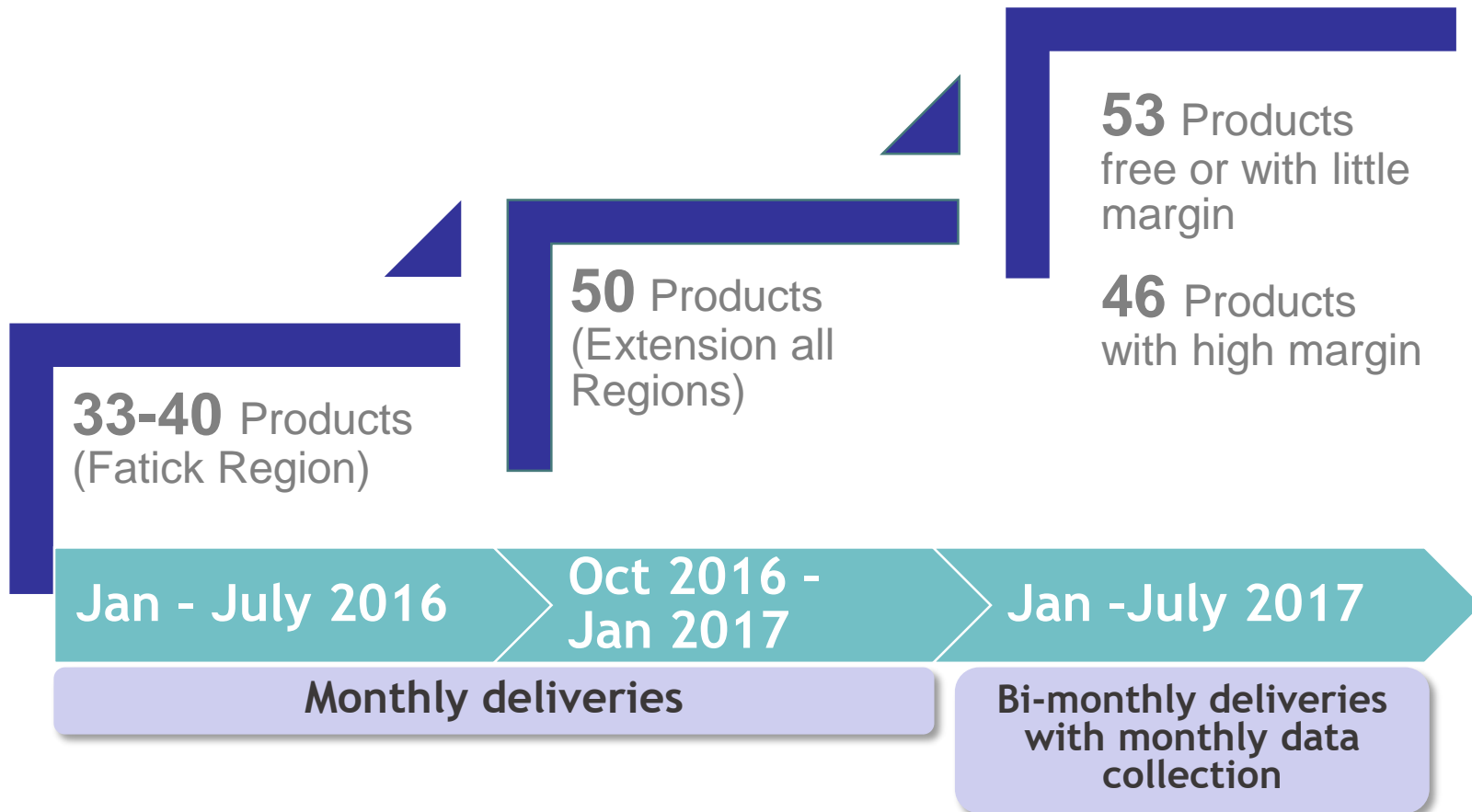
4. Internal analysis with McKinsey & Co.

\*When accounting for additional essential medicines, beyond contraceptives, costs are comparable between insourced and outsourced models

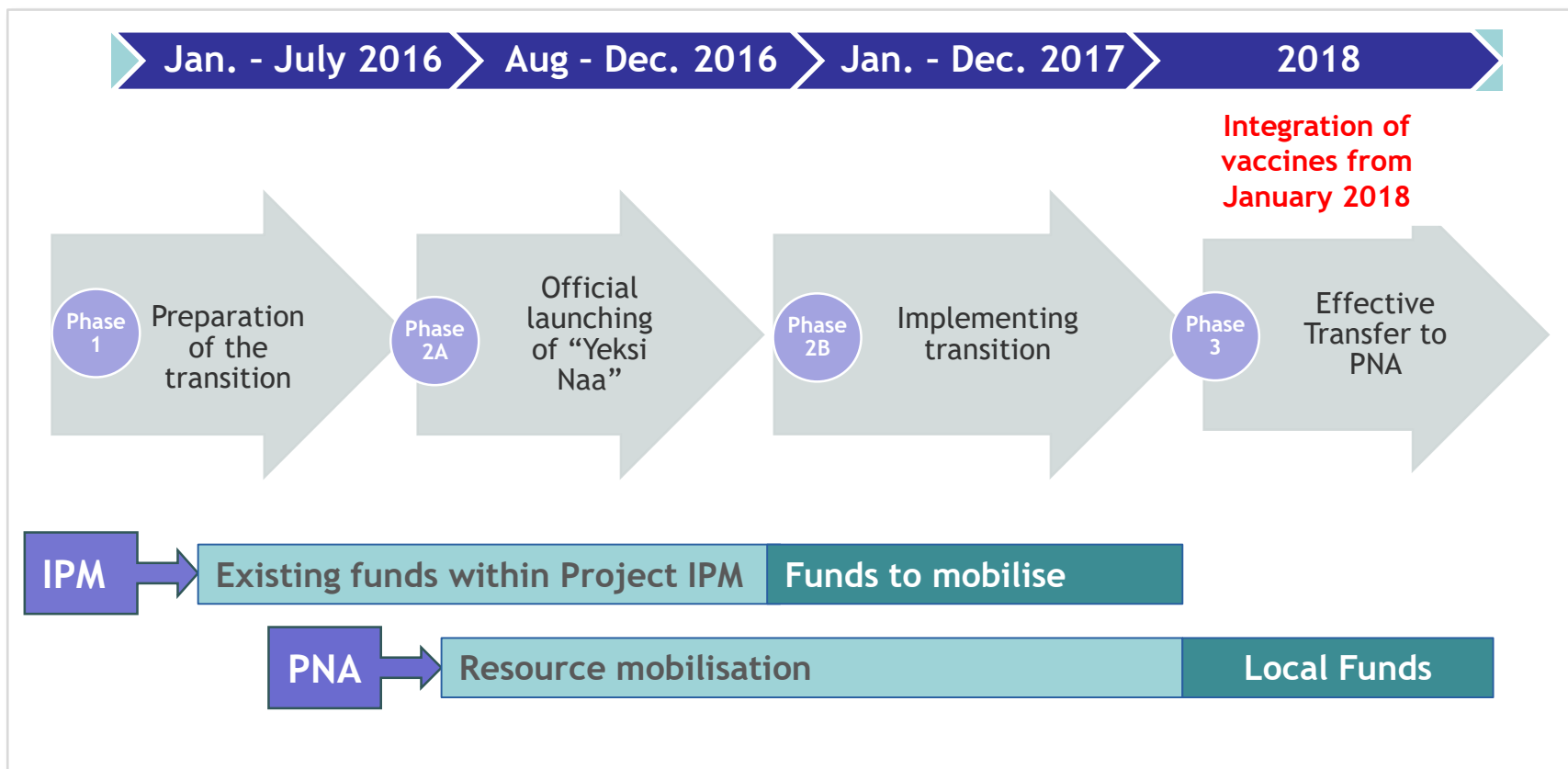


# Product Integration in the Yeksi Naa Approach

Based on successes of IPM-3PL (Yeksi Naa) for contraceptives, the Government of Senegal has committed to expand the Yeksi Naa Approach to other health products

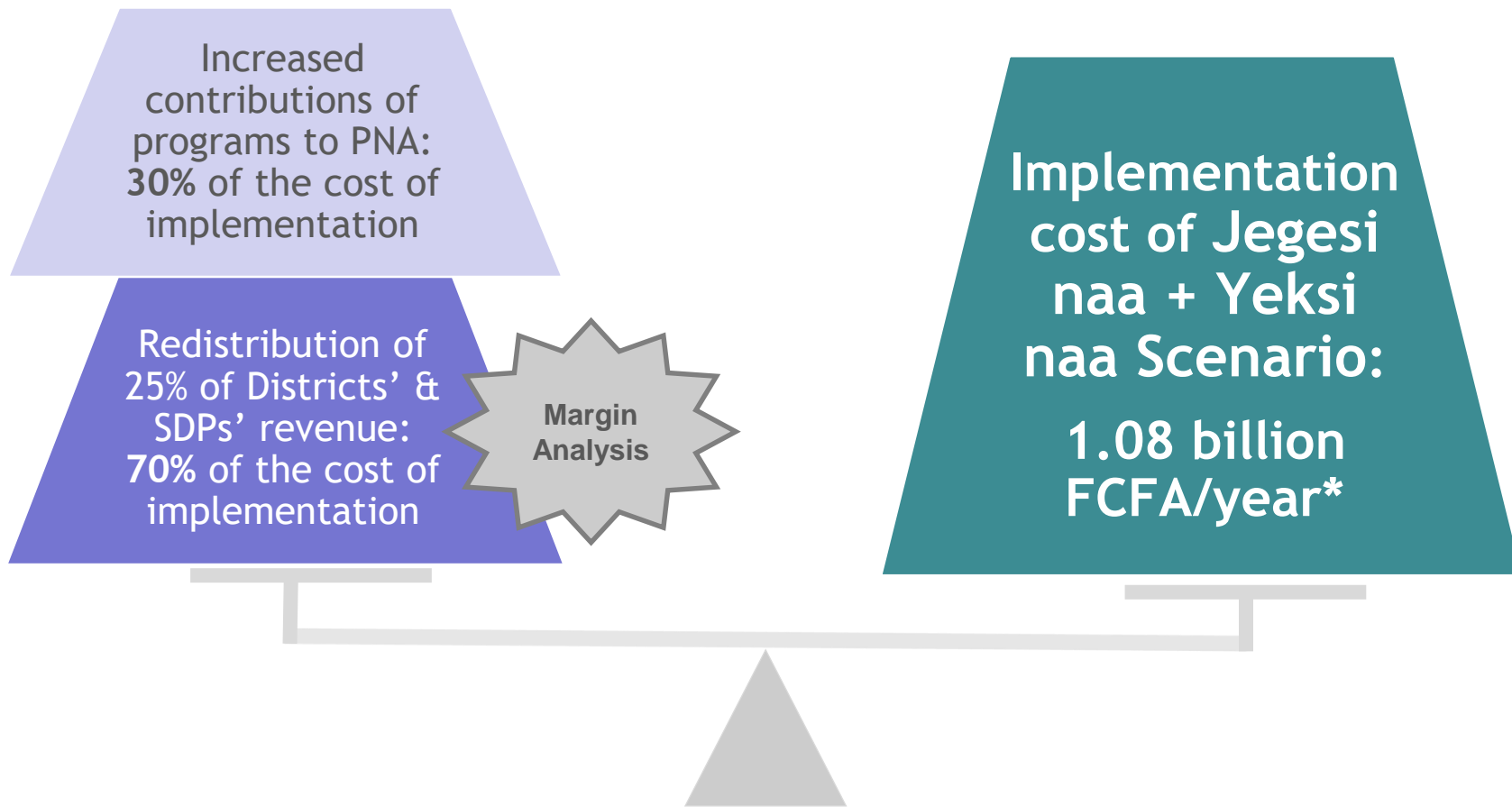


# Transition Plan from IntraHealth-led Project to PNA





# Implementation Cost and Sustainable Funding Perspectives



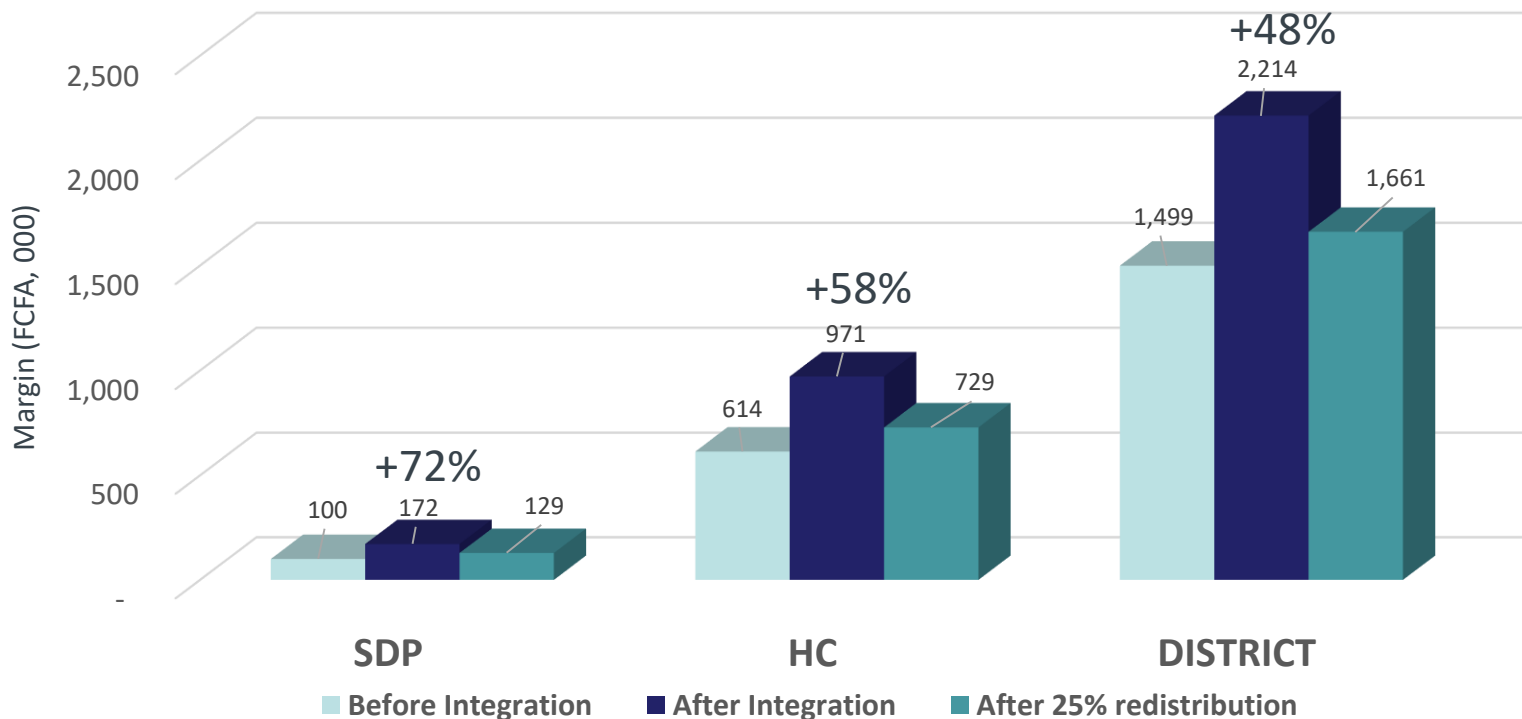
\* Approx. 2 million USD / Year



# Margin Analysis to Determine IPM-3PL Sustainability

Each facility has incremental margin even after covering 100% of its (historical) operating expenses & allocating 25% of its total margin toward IPM-3PL sustainability

**Expected monthly IPM-3PL impact on total margin\***



\* Actual margin available after redistribution should be higher due to lower transportation costs incurred by Districts and SDPs following full-scale integration



*Transition Launch Ceremony, August 2016*

# Thank You!