

SDM: Case Report Anatrans & FairMatch Support, Burkina Faso

Service Delivery Model Assessment

May 2017



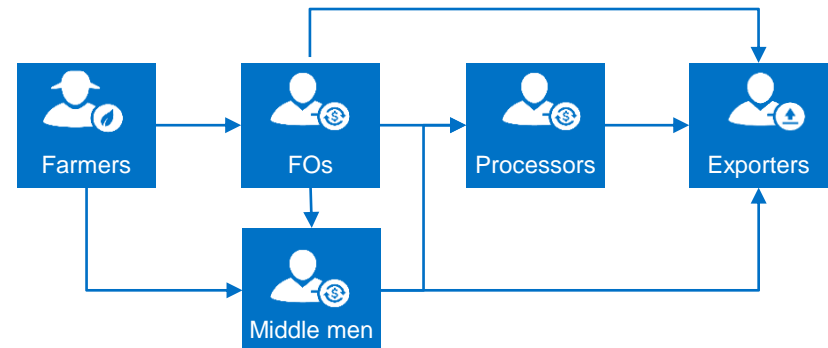
Context – sector and case owner

Anatrans



- Anatrans is a leading Burkinabe cashew processor, based in the country's "agricultural capital" Bobo Dioulasso.
- The company sources from 3,500 farmers who produce on ~20,000 hectares (ha) of land.
- Anatrans is one of few African cashew processors that is fair-trade and organic certified, and carries the African Cashew Alliance (ACA) sustainability seal.

The cashew value chain in Burkina Faso

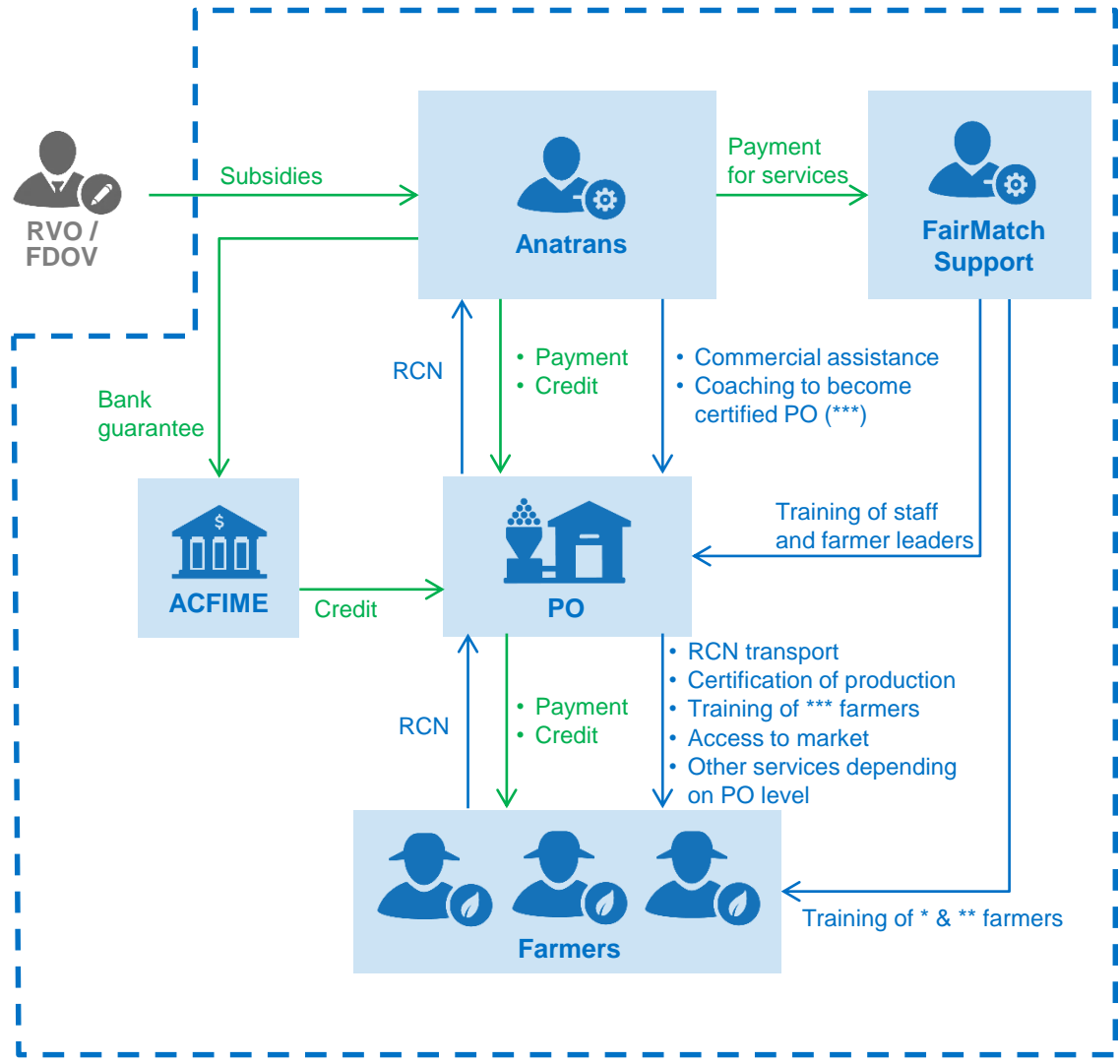


- There are approximately 45,000 households in Burkina Faso with cashew plantations ranging from 1-10 ha*.
- Most of the production is in the Cascades, Sud-Ouest, Hauts-Bassins and Centre-Ouest regions.
- Total production in 2015 was estimated to be 75,000 MT (2.3% of global production), up from 16,500 in 2005. Production is expected to grow to nearly 200,000 MT by 2025**.
- Average yields are around 300 kg/ha, compared to global average of 840kg/ha**.
- Major planting of cashew trees provided a sector boost in 1997 as part of the government's cashew sector development plan.

Sources: FMS and Anatrans input ; * ACI Analysis of the Cashew Value Chain in Burkina Faso ; ** The African Cashew Sector in 2015, RONGEAD/ACI 2015



Overview of services and revenue flow in the SDM






Legend ← Flow of goods and services → Cash flow

Note: *, ** and *** refer to one star, two star and three star POs and farmers. More information on pages 22-23 of this report



What are the objectives of the SDM

The SDM aims to ...	Outcomes per Stakeholder		
	Farmer 	Producer Organization (PO) 	Anatrans 
1 Increase supply of high quality traceable RCN through higher farmer loyalty	<ul style="list-style-type: none"> Higher and more stable incomes (result of training and other services) 	<ul style="list-style-type: none"> Increase revenues (higher sourcing volumes through higher loyalty and more production per member) 	<ul style="list-style-type: none"> Improve supply security (higher capture rate of POs)
2 Improve efficiency of RCN sourcing by organizing farmers and empowering producer organizations	<ul style="list-style-type: none"> Increase empowerment through stronger POs Access to services 	<ul style="list-style-type: none"> Increase revenues Job creation 	<ul style="list-style-type: none"> More efficient sourcing (working with fewer but larger POs)
3 Establish a sustainable sourcing- and service delivery model	<ul style="list-style-type: none"> Higher and more stable incomes (result of training and other services) 	<ul style="list-style-type: none"> POs can offer more services to their members 	<ul style="list-style-type: none"> More efficient sourcing No need to provide non-commercial services to farmers
4 Establish a traceable source of (certified) RCN	<ul style="list-style-type: none"> Higher incomes (certification premiums) 	<ul style="list-style-type: none"> More sustainable business models (certification premiums) 	<ul style="list-style-type: none"> Recognition of sustainability efforts Higher margins Meeting demand

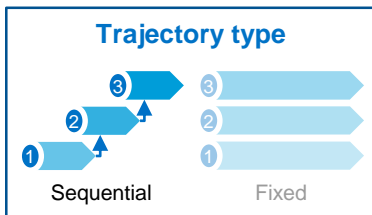


Producer organization segmentation

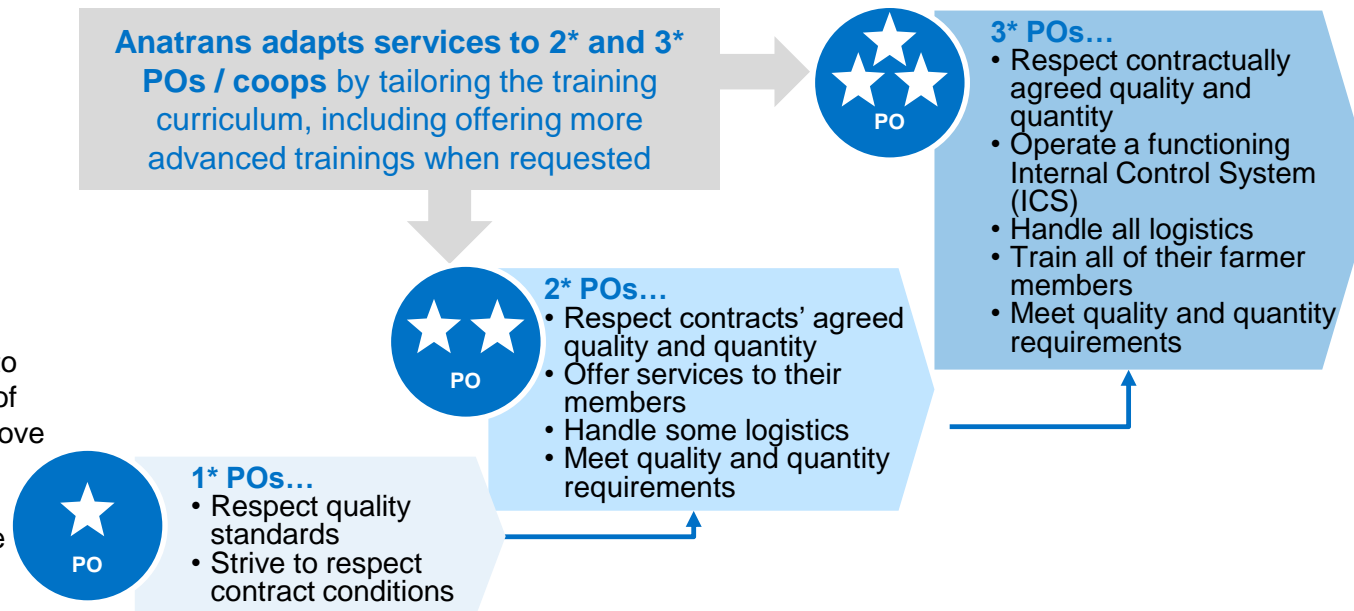
In this SDM, there is **no direct segmentation at a farmer level**. Rather, Anatrans works with POs which are segmented in 1*, 2* and 3* levels. Services offered to farmers differ according to the segment/level of the PO that they are member of. For this SDM, POs can be formal or informal at the 1* and 2* levels. To be certified, 3* POs must be formally registered.

Minimum criteria for entry into SDM		1 star:	2 star:	3 star:
Volume sold to Anatrans	PO has a commercial relationship with Anatrans	10 MT minimum, 20 MT average	200 MT minimum	500 MT minimum
Level of organization		Formal or informal group of farmers	Formal or informal group of farmers & Aggregation of 1* POs	Formal or informal group of farmers & Registered coop with a board and management

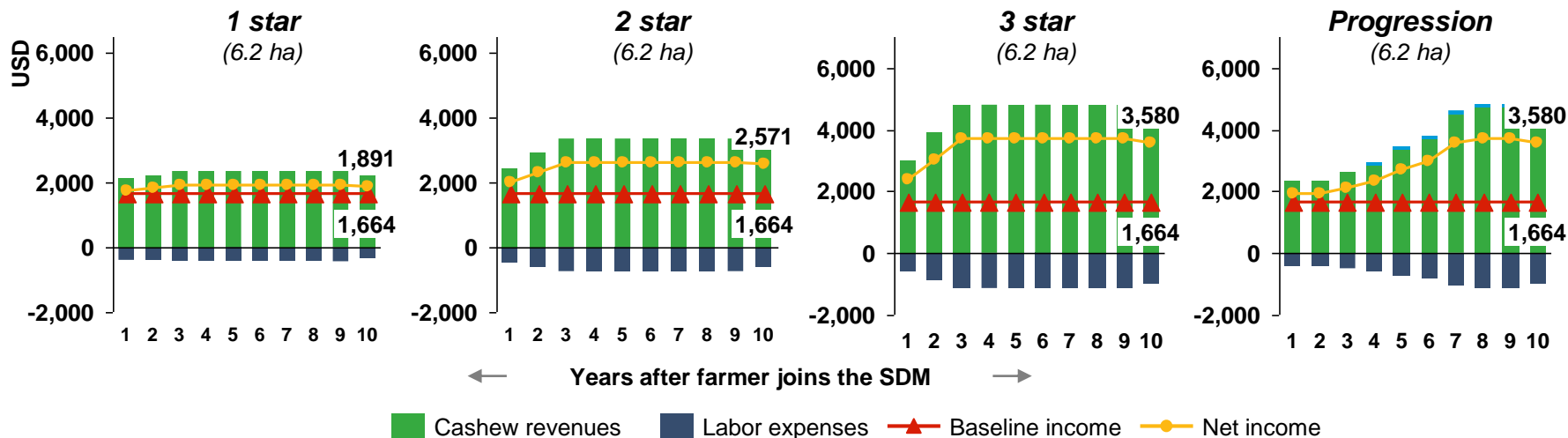
PO trajectory



POs are classified according to commercial criteria and level of professionalism. As POs improve on these, they can move to a higher level, retaining the qualities of the level they have already reached.



Farm P&Ls: overall impact



Economic sustainability at farm level

The first three graphs above show the costs and revenues of different types of farmers (1*, 2*, 3*) over time, assuming they are at peak productivity when entering the program. The fourth graph shows a farmer's income who starts at the 1* level, becomes a 2* farmer after three years, and a 3* farmer after six years.

The profitability increase compared to the baseline by year 10 ranges from 14% (1*) to 120% (3*), with the farmer who "levels up" earning an annual average of 69% more than the baseline farmer over 10 years. This is predominantly due to higher productivity, and to a small degree due to added certification premiums for 3* farmers.

Farmers in 2* and 3* POs have higher production and profitability potential as they receive more follow-up support (e.g., coaching) and the more professional 2* and 3* POs are able to offer better support to farmers.

Main revenue drivers

- **Production:** Cashew tree productivity peaks from the 10th to the 20th year, from then on decreasing, becoming unproductive by the age of 29. With current trees aged 12 on average, future production is expected to remain fairly stable.
- **GAP:** Application of good agricultural practices enables farmers to increase their yields from 300 kg/ha (baseline) to 700 kg/ha (3*).
- **Certification:** 3* farmers produce only certified cashew (FairTrade and organic). This yields them an additional 16CFA/kg (~2.3% additional on top of the regular farm gate price).

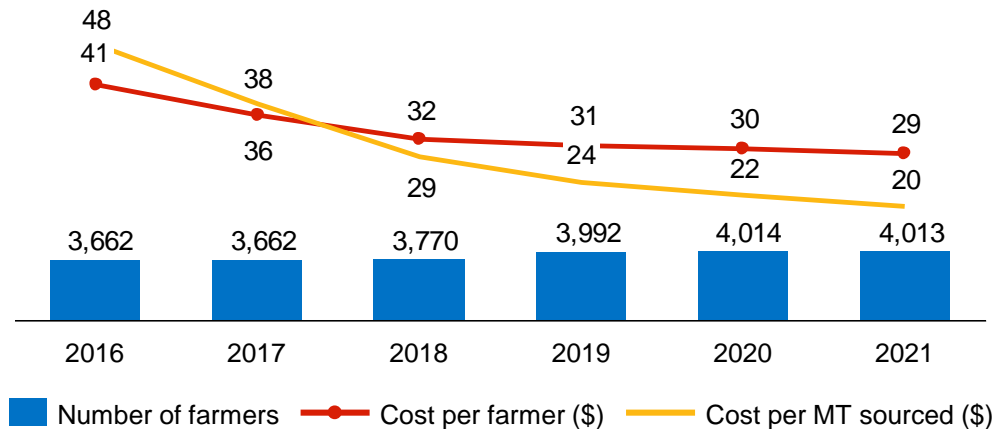
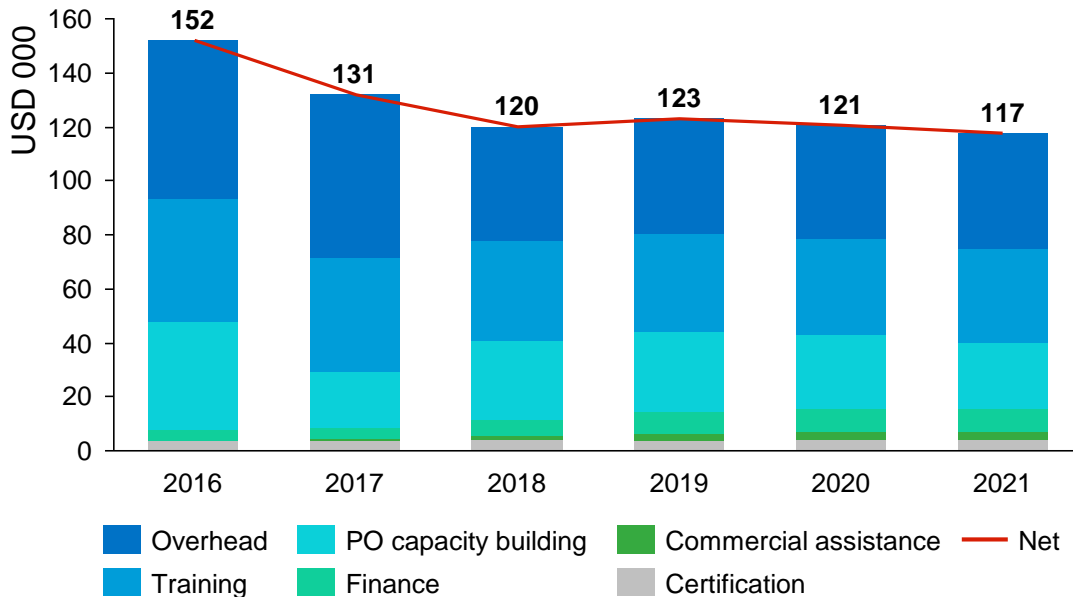
Main cost drivers

- **Labor:** Cashew cultivation is labor intensive, requiring per farm (6.2 ha) between 106-309 days of labor for tree maintenance, cashew harvesting and post-harvesting. The farmer and his/her family can provide on average 192 days, the rest requiring hired labor. With better practices and higher production, more (hired) labor is needed.
- **Inputs:** Very few 3* farmers use manure, therefore these costs are not included in these calculations.

* Based on a combination of measured data, assumptions and projections. Figures will be checked periodically against actual data. Assumptions specified on p. 42.

SDM P&L

Overall SDM costs by service ('000 \$)



Economic sustainability of the program

This SDM is both relatively and absolutely more expensive in its starting year than in subsequent years, dropping in terms of both total annual cost (-23%) and per-farmer cost (-29%) between the initial and final year within the scope of this study.

The decreasing cost per farmer over time appears to be driven mainly by the efficiencies of working with more professional and larger 3* POs.

Main revenue drivers

This SDM does not generate revenues by charging for services. Revenues are assumed to come from the commercial business that Anatrans has with these POs; however for this SDM case study, the commercial return is not in scope. Therefore, there are no revenues within the scope of this analysis. Breakeven commercial margins are calculated on page 53.

Main cost drivers

- **Training:** A team of three FMS trainers is employed almost full time to provide a host of trainings to farmers, lead farmers, and POs. Covering salaries, transport and accommodation for these trainers is the largest cost in the program. This cost decreases as fewer POs need to be visited over time.
- **Overhead:** Costs are stable.
- **Finance:** Increasing numbers of farmers and POs receive loans of increasing volume throughout the program, therefore this cost category increases over time. For direct financing, Anatrans does not charge interest, therefore there are only costs, no revenues.



Innovation in the Anatrans SDM

Type of innovation

Description



PO segmentation and capacity building

Organizational support

Anatrans uses an information management system to record operational data (such as sourcing volumes and cashew quality) when working directly with producer organizations. This allows Anatrans to tailor services to POs based on their needs, building PO capacity, and to develop a relationship with its farmer base.

More professional POs and a better relationship with farmers improve Anatrans' supply security and product quality, as well as reducing SDM costs as more advanced POs take on a service delivery role.

Beekeeping

Agronomic training / diversification

Anatrans plans to add beekeeping to the farmer training curriculum. This would have a twofold benefit for farmers: they gain an additional income stream from honey and beeswax sales (the company Olvea has already been identified as a customer for the latter), and the increased pollination rates on farmers' orchards improve cashew yields.

This intervention has not been analyzed.



Conclusions: key drivers for success and key risks



Key drivers of success

- This SDM has the potential to achieve a significant increase in farmer productivity and farmer incomes.
- Capture rate is a key driver of success, both for POs (proportion of farmer production that is sold to/via POs) and for Anatrans (proportion of total volume per PO that is sold to Anatrans). The SDM incentivizes POs to attain 3* level and to sell more to Anatrans (through an additional premium in return for 3* POs taking on a logistical role)
- Aggregation of farmers into larger POs is a key driver of long-term efficiency. Per-farmer cost reductions (of training in particular) and efficiency increases (of logistical operations) can be realized as 2* POs reach 3* level. There also appears to be a clear business case for POs to reach the 3* level, which creates a win-win situation for both Anatrans and 3* POs. Therefore the graduation of 2* to 3* POs is a key success driver.
- As the investment per farmer is relatively limited compared to other SDMs, the commercial return needed to cover costs is also relatively limited.



Key risks

- The SDM receives quite some funding from external sources (over 40% of the annual budget for each year until 2021), and therefore the commercial sustainability of the SDM without external funding could be a risk. Without external funding, it is unclear whether the SDM would exist or be able to continue. It should be noted that the external funding is explicitly intended to make the SDM commercially self-sustaining over the longer run. As this case study has found that the cost per farmer is relatively low, there could be a good case for operating it on a commercially sustainable basis
- Anatrans as a small local processor is competing with global nut traders who can buy at competitive prices in Burkina Faso and ship raw cashew nuts overseas for processing at low cost. This threatens the commercial viability of the company.
- While most cashew farms in Burkina Faso are young enough to not require immediate rejuvenation, in the longer run, farmers would need to adopt the habit of continuous partial rejuvenation of their farms, to ensure long-term production potential without need for drastic rejuvenation (and as a result, drastic short-term income drops as significant portions of the farm are rejuvenated at once).
- The cashew sector is currently highly volatile, and risks on the commercial side of the business can impact sustainability activities as well.



Lessons learned during the study exercise



Opportunities for improvement

- Anatrans could directly sell processed nuts in high-end / luxury consumer markets where a demand for sustainable traceable cashew exists. This could potentially increase margins Anatrans receives and therefore cover the costs of the program independently from donations.
- Anatrans has an incentive system for farmers to produce higher quality. However, during the last season (2016) no farmer had reached the requirements to qualify for these incentives. Anatrans has now adjusted the system based on these experiences expecting farmers to be able to qualify. Offering these quality incentives can motivate farmers to invest more effort in producing higher quality, which also has a positive impact for Anatrans.
- Segmentation only at the PO level does not allow for services to be tailored to the needs of individual farmers. A highly capable farmer who is a member of a 1* or 2* PO, for instance, cannot currently access the more extensive services available to farmers within such POs. However, for efficiency reasons Anatrans is targeting POs rather than individual farmers.



Key factors in replication of the model

- **PO segmentation and grouping** to enable tailored service delivery and improve commercial relationships between high-performing POs and Anatrans.
- **Training of competent lead farmers** to allow training of farmers through POs rather than FMS.
- This SDM has a remarkably low cost per farmer and a high value creation at farm level versus the amount invested. Even when considering the fact that the vast majority of the funding for this SDM comes from external donors, it appears that this SDM could be commercially sustainable. For instance, only relatively small commercial returns are needed to cover the investments in farmers; likewise, the high benefits for farmers could potentially justify charging some programmatic fees to farmers for some of the services.





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