ເລກທີໂຄງການ: FST/2023/153

ໂຄງການຂະຫຍາຍຕົວແບບຍືນຍົງໃນການຈັດການປ່າໄມ້ ແລະ ອຸດສະຫະກຳປຸງແຕ່ງໄມ້ ໃນ ສປປ ລາວ ແລະ ອົດສະຕຣາລີ

ຊື່ບົດລາຍງານ: ບົດລາຍງານໂດຍຫຍໍ້ ຄວາມຕ້ອງການວັດຖຸດິບ ແລະ ຕ່ອງໂສ້ຜະລິດຕະພັນຂອງບໍລິສັດ ຊັນເປເປີ (ເຊໂປນ)









Development Partners

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Australian Government

Australian Centre for International Agricultural Research

ບົດລາຍງານໂດຍຫຍໍ້ ຄວາມຕ້ອງການອັດຖຸດິບ ແລະ ຕ່ອງໂສ້ ຜະລິດຕະພັນຂອງບໍລິສັດ ຊັນເປເປີ (ເຊໂປນ)

ກິດຈະກຳໂຄງການ	**Market research and logistics**
ວັນທີສິ້ງໂຄງການ	ພຶດສະພາ **2026**
ຮຽບຮຽງໂດຍ	**Stephen Midgley, Phouluang Chounlamounty, Vansy Phengthajaim and Khamsing Keothoumma**
ຜູ້ຮ່ວມມື	**Salwood Asia Pacific Pty Ltd**
ຍັ້ງຍືນໂດຍ:	ຫົວໜ້າໂຄງການ Valtip 4



ບົດລາຍງານໂດຍຫຍໍ້

ບໍລິສັດ ຊັນເປເປີ ຕັ້ງຢູ່ ເຊໂປນ ແຂວງສະຫວັນນະເຂດ ແລະ ມີມູນຄ່າການລົງທຶນ 1,200 ລ້ານໂດລາສະຫາ ລັດ (1.2 ຕື້ໂດລາ) ເຊິ່ງເປັນການລົງທຶນທີ່ມີມູນຄ່າສູງທີ່ສຸດ ໃນຂະແໜງປ່າໄມ້ ແລະ ກະສິກຳໃນ ສປປ ລາວ. ບໍລິສັດມີມູນຄ່າການສົ່ງອອກຜະລິດຕະພັນສູງເຖິງ 750 ລ້ານໂດລາສະຫາລັດຕໍ່ປີ. ໂຄງການດັ່ງກ່າວ ໄດ້ຮັບການ ຮັບຮອງຢ່າງເປັນທາງການໃຫ້ເປັນໂຄງການຕົວແບບ ທີ່ສະໜັບສະໜູນຂໍ້ລິເລີ່ມ "ໜຶ່ງແລວ ໜຶ່ງເສັ້ນທາງ" (BRI) ຂອງຈີນ. ໂຮງງານແບບຄົບວົງຈອນແຫ່ງນີ້ ດຳເນີນງານພາຍໃຕ້ລະບົບເສດຖະກິດຊີວະພາບໝຸນວຽນ (Circular Bio-economy Loop) ໂດຍການປ່ຽນຂະບວນການສິ່ງເສດເຫຼືອໃຫ້ກາຍເປັນພະລັງງານ ແລະ ຝຸ່ນເຄມີ. ເຖິງ ແມ່ນວ່າບໍລິສັດຈະສາມາດສ້າງຄວາມດຸນການຄ້າທາງຍຸດທະສາດໃນດ້ານບວກ ໃນປີ 2025 ໄດ້ເຖິງ 138 ລ້ານໂດ ລາສະຫະລັດກໍຕາມ ແຕ່ການດຳເນີນງານສ່ວນໃຫຍ່ ແມ່ນຍັງມີລັກສະນະເປັນເຂດອຸດສາຫະກຳແບບການເຜິ່ງພາ. ການຕອບສະໜອງໄມ້ປົດ ເຂົ້າໃນການຜະລິດ (ໄມ້ວິກ) ແມ່ນນຳເຂົ້າຈາກປະເທດໄທສູງເຖິງ 80% ແລະ ຕ້ອງເຜິ່ງ ພາການນຳເຂົ້າ ເຈ້ຍເສດຈາກຕ່າງປະເທດທັງໝົດ, ເຮັດໃຫ້ມີຄວາມສ່ຽງ ແລະ ອ່ອນໄຫວຕໍ່ກັບສະພາວະວິກິດການ ດ້ານພະລັງງານໃນພາກພື້ນ ລວມທັງການແຂ່ງຂັນດ້ານວັດຖຸດິບໃນລະດັບສາກົນ.

ຜົນການສຶກສາ

1. ຂະໜາດ ແລະ ໂຄງສ້າງພື້ນຖານຂອງໂຮງງານ

- **ກຳລັງການຜະລິດ:** ໂຮງງານປະກອບມີ ໂຮງງານຜະລິດຜັດສະດຸຫຸ້ມຫໍ່ ເຊິ່ງມີກຳລັງການຜະລິດ 1.0 ລ້ານໂຕນຕໍ່ປີ, ໂຮງງານຜະລິດເຄມີເຍື່ອເຈ້ຍທີ່ມີກຳລັງການຜະລິດ 350,000–400,000 ໂຕນຕໍ່ປີ, ແລະ ໂຮງງານຜະລິດຣີໄຊເຄິນເຈ້ຍເສດ ທີ່ມີກຳລັງການຜະລິດ 400,000 ໂຕນຕໍ່ປີ.
- **ການກຸ້ມຕົນເອງດ້ານພະລັງງານ:** ພະລັງງານທີ່ນຳໃຊ້ແມ່ນມີສັດສ່ວນລວມກັນປະມານ 180–190 ເມກາວັດ ເຊິ່ງໄດ້ມາຈາກການນຳໃຊ້ຖ່ານຫີນ, ຈາກໂຮງໄຟຟ້າຄວາມຮ້ອນຊີວະມວນທີ່ນຳໃຊ້ສິ່ງເສດເຫຼືອຈາກໂຮງງານ ແລະ ເສດໄມ້, ແລະ 60 ເມກາວັດແມ່ນມາຈາກເຂື່ອນໄຟຟ້ານ້ຳຕົກ ເຊລະນອງ 1 ທີ່ທາງບໍລິສັດຖືຫຸ້ນສ່ວນລາຍໃຫຍ່.

2. ການເພິ່ງພາອາໄສວັດຖຸດິບຈາກພາຍນອກເປັນຫຼັກ

- **ການຂາດແຄນວັດຖຸດິບປະເພດເສັ້ນໃຍໄມ້:** ໂຮງງານຜະລິດເຄມີເຍື່ອເຈ້ຍ ແມ່ນມີຄວາມຕ້ອງການໄມ້ບົດດິບສູງເຖິງ 1.8 ລ້ານໂຕນຕໍ່ປີ. ແຕ່ການສະໜອງວັດຖຸດິບຈາກພາຍໃນປະເທດລາວ ແມ່ນສາມາດຕອບສະໜອງໄດ້ພຽງແຕ່ 20% ຂອງຄວາມຕ້ອງການທັງໝົດເທົ່ານັ້ນ, ເຮັດໃຫ້ຕ້ອງເພິ່ງພາການນຳເຂົ້າໄມ້ບົດ (ໄມ້ວີກ) ຈາກປະເທດໄທເຖິງ 80% ຊຶ່ງມີມູນຄ່າຕົກໜ້າໂຮງງານເຊໂປນ ສູງເຖິງ 110 ລ້ານໂດລາສະຫະລັດ.

- **ຕົ້ນທຶນການຂົນສົ່ງຂອງການນຳເຂົ້າໄມ້ບົດຈາກປະເທດໄທ:** ລວມຕົ້ນທຶນການປ່ຽນຖ່າຍສິນຄ້າ ແລະ ການຂົນສົ່ງຮອດໜ້າໂຮງງານ(ເຊໂປນ) ໄມ້ບົດດິບແມ່ນລາຄາ ຫລາຍກວ່າ 73 ໂດລາສະຫະລັດຕໍ່ໂຕນ, ຊຶ່ງມີຄວາມແຕກຕ່າງທາງດ້ານລາຫຽບໃສ່ກັບລາຄາເກັບຊື້ວັດຖຸດິບຈາກພາຍໃນປະເທດປະມານ 33 ໂດລາສະຫະລັດຕໍ່ໂຕນ.
- **ການຈັດຫາເສດເຈ້ຍຈາກທະວີບອາເມຣິກາເໜືອ:** ໃນປີ 2025, ສາຍການຜະລິດ ເຈ້ຍຣີໄຊເຄິນ ໄດ້ນຳເຂົ້າກ່ອງກະດາດລູກຟູກເກົ່າຂອງອາເມຣິກາ (American Old Corrugated Containers ຫຼື AOCC) ຈຳນວນ 1.68 ລ້ານໂຕນ ຊຶ່ງມີມູນຄ່າ 415 ລ້ານໂດລາສະຫະລັດ ໂດຍຈັດຫາຜ່ານບໍລິສັດ ວັນເດີຟູ ເປເປີ ຊຶ່ງເປັນບໍລິສັດໃນເຄືອຂ່າຍດຽວກັນທັງໝົດ ທີ່ຕັ້ງຢູ່ໃນອາເມຣິກາເໜືອ.

3. ສະພາບຄວາມເປັນຈິງ ແລະ ຈຸດຕິດຂັດດ້ານການຂົນສົ່ງ

- **ການຂົນສົ່ງສິນຄ້າໃນປະລິມານຫຼາຍ:** ການຂົນຍ້າຍວັດຖຸດິບຂາເຂົ້າ ແລະ ການສົ່ງອອກສິນຄ້າສຳເລັດຮູບ ທີ່ມີປະລິມານລວມກັນປະມານ 4 ລ້ານໂຕນນັ້ນ ຕ້ອງໄດ້ນຳໃຊ້ລົດບັນທຸກໃນການຂົນສົ່ງໄປ-ກັບ ປະມານ 75,000 ເຖິງ 80,000 ຖ້ຽວຕໍ່ປີ, ຊຶ່ງສະເລ່ຍແລ້ວມີລົດບັນທຸກໜັກຫຼາຍກວ່າ 670 ຄັນ ທີ່ຕ້ອງເດີນທາງຜ່ານດ່ານຊາຍແດນລາວບາວ ແລະ ສະຫວັນນະເຂດໃນແຕ່ລະວັນ.
- **ຄວາມທ້າທາຍໃນການຂົນສົ່ງຜ່ານແດນ:** ຫາກມີຄວາມຊັກຊ້າໃດໆ ເກີດຂຶ້ນຢູ່ທີ່ດ່ານຊາຍແດນ ແມ່ນຈະສົ່ງຜົນກະທົບ ແລະ ອາດສ້າງຄວາມເສຍຫາຍຫຼາຍ.

4. ສິ່ງທ້າທາຍຈາກພາຍນອກຕໍ່ກັບຕ່ອງໂສ້ອຸປະທານ (2026)

- **ວິກິດການດ້ານພະລັງງານ ປີ 2026:** ການເພີ່ມຂຶ້ນຂອງລາຄານ້ຳມັນກາຊວນໃນພາກພື້ນເມື່ອບໍ່ດົນມານີ້ ໄດ້ສົ່ງຜົນກະທົບຢ່າງຮ້າຍແຮງ (ເພີ່ມຕົ້ນທຶນ) ຕໍ່ກັບລະບົບການຂົນສົ່ງສິນຄ້າໄລຍະທາງໄກ ແລະ ເຮັດໃຫ້ຕົ້ນທຶນການສົ່ງມອບໄມ້ປົດຈາກປະເທດໄທເພີ່ມສູງຂຶ້ນ.

- **ການແຂ່ງຂັນສູງຈາກອິນໂດເນເຊຍ:** ສືບເນື່ອງມາຈາກ "ວິກິດອອກໃບອະນຸຍາດ" ຂອງອິນໂດເນເຊຍໃນທ້າຍປີ 2025, ໂຮງງານຂະໜາດໃຫຍ່ໃນພາກພື້ນ ເຊັ່ນ: ບໍລິສັດ APRIL ແລະ APP ໄດ້ເພີ່ມການນຳເຂົ້າໄມ້ປົດໃນພາກພື້ນຂຶ້ນເປັນໜຶ່ງເທົ່າຕົວ ເພື່ອຄ້ຳປະກັນການມີວັດຖຸດິບປະເພດເສັ້ນໃຍໄມ້ໄວ້ໃຊ້, ຊຶ່ງໄດ້ສ້າງການແຂ່ງຂັນໃນການຍາດຊິງໄມ້ປົດຈາກປະເທດໄທ ແລະ ເຮັດໃຫ້ລາຄາສົ່ງອອກເພີ່ມສູງຂຶ້ນ.
- **ທ່າອ່ຽງການຂາດແຄນເສດເຈ້ຍ AOCC:** ບັນດາໂຮງງານໃນທະວີບອາເມຣິກາເໜືອພວມຫັນມານຳໃຊ້ເສັ້ນໃຍຣີໄຊເຄິນໃນປະລິມານທີ່ຫຼາຍຂຶ້ນ, ຊຶ່ງເຮັດໃຫ້ປະລິມານການສົ່ງອອກທີ່ມີໃນຕະຫຼາດຫຼຸດລົງ ແລະ ສົ່ງຜົນໃຫ້ລາຄາໃນຕະຫຼາດໂລກເພີ່ມສູງຂຶ້ນ.

5. ສະພາບລວມແລະ ການສູນເສຍໂອກາດທາງດ້ານເສດຖະກິດຂອງຊາວສວນປູກໄມ້ຂະນາດນ້ອຍ

- **ຄວາມແຕກໂຕນຂອງລາຄາໄມ້ຢືນຕົ້ນ:** ໄມ້ພາຍໃນປະເທດລາວແມ່ນມີຄວາມສາມາດໃນການແຂ່ງຂັນ ໂດຍມີລາຄາສົ່ງມອບຮອດໜ້າໂຮງງານຢູ່ທີ່ 40 ໂດລາສະຫະລັດຕໍ່ໂຕນສຳລັບໄມ້ທ່ອນ, ແຕ່ຊາວສວນຜູ້ປູກໄມ້ຂະນາດນ້ອຍ ແມ່ນໄດ້ຮັບລາຄາໄມ້ຢືນຕົ້ນ ໃນລາຄາທີ່ຕ່ຳຫຼາຍ ພຽງແຕ່ 5 ເຖິງ 15 ໂດລາສະຫະລັດຕໍ່ໂຕນເທົ່ານັ້ນ. ເມື່ອປຽບທຽບໃສ່ກັບ ຊາວສວນລາຍນ້ອຍ ຢູ່ຫວຽດນາມໃນການຂາຍໄມ້ເຂົາເຈ້ົາສູງເຖິງ 35-40 ໂດລາສະຫະລັດຕໍ່ໂຕນ, ຢູ່ປະເທດໄທແມ່ນລາຄາ 29-32 ໂດລາສະຫະລັດຕໍ່ໂຕນ ແລະ 44-51 ໂດລາສະຫະລັດຕໍ່ໂຕນ ຢູ່ແຂວງ ກວາງຊີ (ປະເທດຈີນ).
- **ຊ່ອງວ່າງການຮ້ວໄຫລໃນຕ່ອງໂຕ:** ກຸ່ມພໍ່ຄ້າຄົນກາງ, ນາຍໜ້າ ແລະ ຜູ້ຮັບເໝົາດ້ານການຂົນສົ່ງ ໄດ້ຫັກເອົາສ່ວນຕ່າງ ທາງຜົນປະໂຫຍດໄປເຖິງ 60% ຫາ 85% ຂອງລາຄາສົ່ງມອບຮອດໜ້າໂຮງງານໃນລາວ, ທຽບໃສ່ ປະເທດໄທ ປະມານ 20% ຫາ 25%.
- **ການແຂ່ງຂັນກັບພືດເສດຖະກິດໄລຍະສັ້ນ:** ກະແສເງິນສົດ (ລາຍໄດ້) ຈາກການເຮັດສວນປູກໄມ້ວົກ ຈະຕ້ອງສາມາດແຂ່ງຂັນກັບພືດຊະນິດອື່ນ ເຊັ່ນ: ມັນຕົ້ນ ເພື່ອເຮັດໃຫ້ການປູກໄມ້ຊະນິດນີ້ຍັງຄົງມີຄວາມດຶງດູດໃຈສຳລັບຊາວສວນປູກ ທີ່ເຮັດໃນຮູບແບບພັນທະສັນຍາ ແລະ ຊາວສວນລາຍຍ່ອຍ.

6. ການຈ້າງແຮງງານ

- ຕຳແໜ່ງງານດ້ານເຕັກນິກຂັ້ນສູງ: ໂຮງງານດຳເນີນຜະລິດນຳໃຊ້ພະນັກງານຊາວຈີນ 450 ຫາ 600 ຄົນ ເຮັດໜ້າທີ່ໃນສ່ວນຂອງຜູ້ບໍລິຫານລະດັບສູງເຊັ່ນ: ວິສະວະກຳເຄມີ ແລະ ການບຳລຸງຮັກສາໂຮງໄຟຟ້າ, ຄວບຄູ່ໄປກັບພະນັກງານຝ່າຍປະຕິບັດການ ແລະ ພາກສະໜາມຄົນລາວອີກ 1,500 ຄົນ.
- ຄວາມມຸ່ງໝັ້ນໃນການຫັນເປັນແຮງງານທ້ອງຖິ່ນ ແລະ ການສ້າງທີມງານຊ່າງເຕັກນິກລາວແບບສອງພາສາ ບໍລິສັດ ຊັນ ເປ ເປີ ພວມຈັດຕັ້ງປະຕິບັດຮູບແບບການຝຶກອົບຮົມສີມືແຮງງານ ຊຶ່ງຜ່ານມາໄດ້ໃຫ້ທຶນສະໜັບສະໜູນແກ່ນັກສຶກສາ ສາຍອາຊີວະສຶກສາຄົນລາວໄປແລ້ວ 108 ຄົນ ເພື່ອໄປສຶກສາຕໍ່ດ້ານວິສະວະກຳເຕັກນິກ ແລະ ການປ່າໄມ້ ຢູ່ທີ່ວິທະຍາໄລຕ່າງໆ ໃນປະເທດຈີນ.

7. ຂໍ້ສະເໜີແນະດ້ານນະໂຍບາຍ ແລະ ຍຸດທະສາດ

- **ເລັ່ງລັດການຂະຫຍາຍພື້ນທີ່ປູກໄມ້ພາຍໃນປະເທດໃຫ້ບັນລຸ 100,000 ເຮັກຕາ:** ສະໜັບສະໜູນດ້ານນະໂຍບາຍຕາມເປົ້າໝາຍຂອງບໍລິສັດ ຊັນ ເປເປີ ໃນການຂະຫຍາຍພື້ນທີ່ປູກໄມ້ພາຍໃນປະເທດ (ໂດຍຕັ້ງເປົ້າໝາຍພື້ນທີ່ສຳປະທານ 30,000 ເຮັກຕາ ແລະ ເຮັດສວນປູກໄມ້ແບບພັນທະສັນຍາກັບຜູ້ປູກໄມ້ລາຍຍ່ອຍ 70,000 ເຮັກຕາ) ເພື່ອຫຼຸດຜ່ອນການເພິ່ງພາການນຳເຂົ້າຈາກປະເທດໄທ.
- **ສ້າງສູນຮັບຊື້ຜົນຜະລິດໂດຍກົງໃນລະດັບເມືອງ:** ຫຼຸດຜ່ອນການຮົ່ວໄຫຼຂອງມູນຄ່າທີ່ເຫັນໄດ້ຊັດເຈນ ໂດຍການສ້າງສຳນັກງານ/ສະຫະກອນ ເພື່ອເປັນຕົວແທນ ເພື່ອຄ້ຳປະກັນໃຫ້ຊາວສວນລາຍຍ່ອຍ ໄດ້ຮັບລາຄາມູນໄມ້ທີ່ສູງຂຶ້ນ ເມື່ອທຽບໃສ່ກັບລາຄາສິ່ງມອບຮອດໜ້າໂຮງງານ.
- **ສະເໜີລາຄາຮັບຊື້ໄມ້ພາຍໃນປະເທດທີ່ສາມາດແຂ່ງຂັນໄດ້:** ຊຸກຍູ້ໃຫ້ບໍລິສັດ ຊັນ ເປເປີ ປັບປຸງຍຸດທະສາດການຈັດຊື້ ໂດຍການສະເໜີລາຄາໄມ້ຢືນຕົ້ນ ຂັ້ນຕ່ຳຢູ່ທີ່ 30 ໂດລາສະຫະລັດຕໍ່ໂຕນ. ວິທີນີ້ຈະຊ່ວຍປົກປ້ອງໂຮງງານຈາກສະພາວະວິກິດການດ້ານອຸປະທານພາຍນອກໄດ້ຢ່າງມີປະສິດທິຜົນ. ຖ້າຫາກທຽບລາຄານີ້ສຳລັບໄມ້ພາຍໃນປະເທດ ກໍ່ຍັງຖືວ່າຕ່ຳກວ່າຕົ້ນທຶນການນຳເຂົ້າຈາກໄທ ເຊິ່ງຍັງມີທ່າອ່ຽງເພີ່ມສູງຂຶ້ນ.
- **ເລັ່ງຮັດກຸ່ມກ່ຽວກັບການຖືຄອງກຳມະສິດທີ່ດິນ:** ລັດຖະບານ ຫຼື ພາກສ່ວນທີ່ກ່ຽວຂ້ອງ ຄວນເລັ່ງເຮັດການອອກໃບຕາດິນຢ່າງເປັນທາງການໃຫ້ແກ່ຊາວສວນລາຍຍ່ອຍໃນເຂດຊົນນະບົດ ເພື່ອສ້າງຄວາມໝັ້ນຄົງ ແລະ ຄວາມໝັ້ນໃຈໃນການປູກໄມ້ວົງ ທີ່ມີຮອບວຽນການຕັດຫຼາຍປີ.
- **ກະຈາຍແຫຼ່ງຕອບສະໜອງເສດເຈ້ຍ:** ສຶກສາຄົ້ນຄວ້າກ່ຽວກັບນະໂຍບາຍ ແລະ ສິ່ງຈູງໃຈດ້ານການຂົນສົ່ງ ເພື່ອສ້າງເຄືອຂ່າຍການເກັບຊື້ເສດເຈ້ຍ ພາຍໃນອະນຸພາກພື້ນແມ່ນ້ຳຂອງ, ຊຶ່ງຈະຊ່ວຍຫຼຸດຜ່ອນຄວາມສ່ຽງຂອງໂຮງງານ ໃນການເພິ່ງພາເສດເຈ້ຍຈາກໃນທະວີບອາເມຣິກາເໜືອພຽງແຫຼ່ງດຽວ.

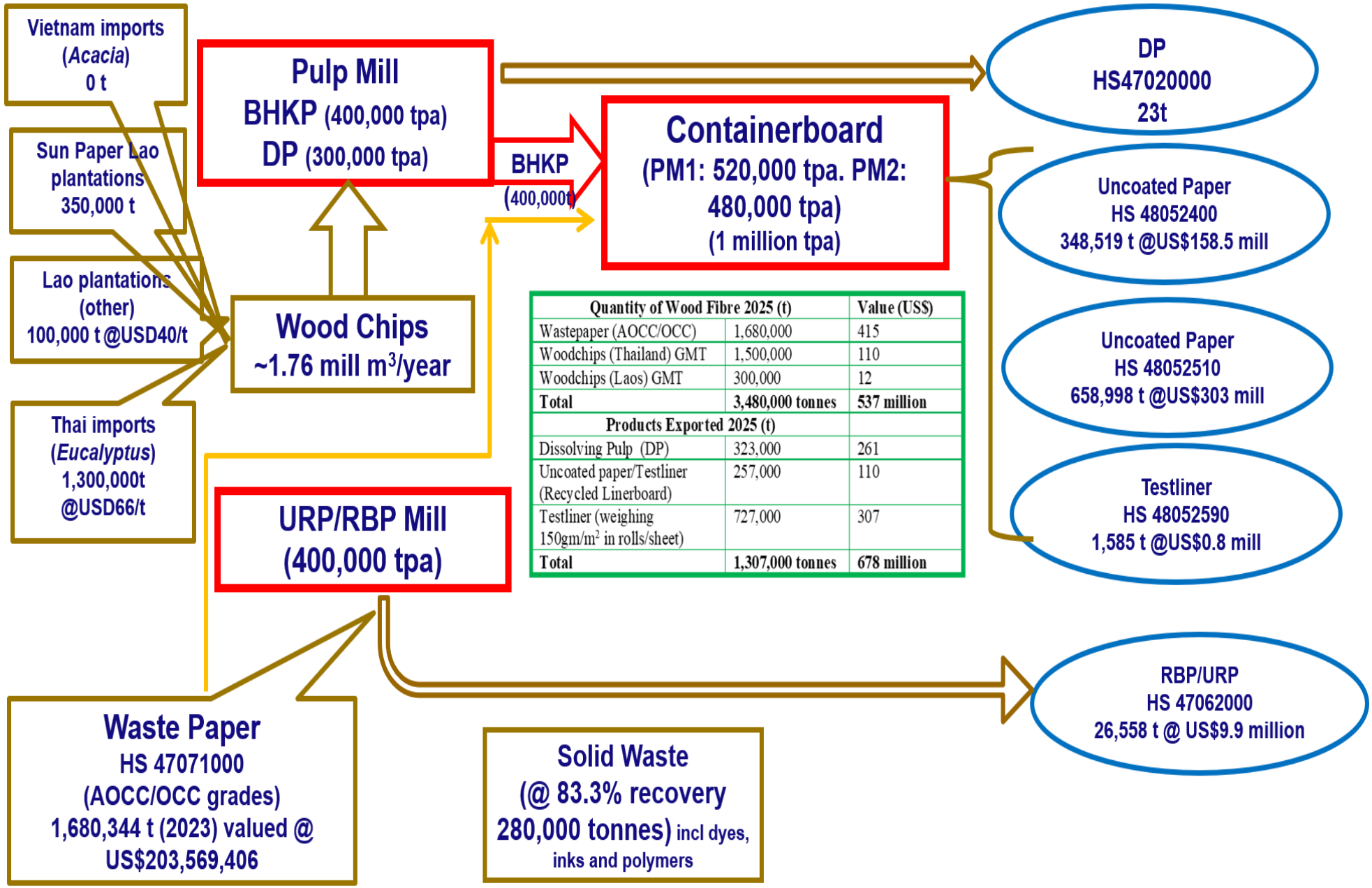
8. ບົດຮຽນທີ່ໄດ້ຮັບຈາກໂຄງການ

ການລົງທຶນທີ່ກ່ຽວຂ້ອງກັບການຜະລິດເຍື່ອເຈ້ຍໃນອະນາຄົດ ອາດຈະມີການນຳໃຊ້ໂມເດວຈາກໂຮງງານປະຈຸບັນ. ໃນການກຽມຄວາມພ້ອມສຳລັບການລົງທຶນໃນອະນາຄົດ, **ມີບົດຮຽນຫຍັງແດ່ທີ່ສາມາດຖອດຖອນໄດ້ ເພື່ອຄ້ຳປະກັນໃຫ້ການລົງທຶນໃນພາກໜ້າ ທີ່ຍັງຄົງສາມາດສ້າງຜົນກຳໄລໃຫ້ແກ່ບໍລິສັດ ແລະ ສ້າງຜົນປະໂຫຍດໃຫ້ແກ່ ສປປ ລາວ?**

9. ຂໍ້ຈຳກັດໃນການສຶກສາ ແລະ ຂໍ້ສະເໜີແນະ

ຜົນການສຶກສາຄັ້ງນີ້ ແມ່ນອີງໃສ່ແຫຼ່ງຂໍ້ມູນຈາກສາທາລະນະ, ສະຖິຕິການຄ້າ, ແລະ ທັດສະນະຄະຕິທີ່ມີຄຸນຄ່າຈາກຊາວສວນໃນທ້ອງຖິ່ນ ລວມທັງເຈົ້າໜ້າທີ່ຂະແໜງການປ່າໄມ້. ເຖິງແມ່ນວ່າ ການສຶກສາຄັ້ງນີ້ ຈະບໍ່ໄດ້ລວມເອົາການປຶກສາຫາລືໂດຍກົງກັບ ບໍລິສັດ ຊັນ ເປເປີ (Sun Paper) ກໍຕາມ, ແຕ່ພວກເຮົາໄດ້ຍຶດຖືເອົາທັດສະນະ ແລະ ວິໄສທັດຂອງບໍລິສັດ ເປັນສິ່ງສຳຄັນ ເພື່ອເຮັດໃຫ້ຄວາມເຂົ້າໃຈຕໍ່ກັບສະພາບລວມຂອງບໍລິສັດ.ພວກເຮົາໄດ້ມີຄວາມພະຍາຍາມທຸກວິຖີທາງ ແລະ ໃນການກັ້ນຕອງ ຄວາມຖືກຕ້ອງຂອງຂໍ້ມູນທີ່ໄດ້ຈາກບັນດາແຫຼ່ງຂໍ້ມູນທີ່ມີສາມາດເຂົ້າເຖິງໄດ້ ແລະ ເຖິງຢ່າງໃດກໍຕາມ ທາງທີມງານຜູ້ຂຽນແມ່ນມີຄວາມຍິນດີຢ່າງຈິງໃຈ ຕໍ່ກັບຄຳຄິດເຫັນ, ຂໍ້ແກ້ໄຂ, ຫຼື ຂໍ້ມູນອັບເດດຈາກທາງບໍລິສັດ ເພື່ອຊ່ວຍປັບປຸງການວິເຄາະນີ້ໃຫ້ມີຄວາມລະອຽດ ແລະ ສົມບູນຂຶ້ນຕື່ມ.





Quantity of Wood Fibre 2025 (t)		Value (US$)
Wastepaper (AOCC/OCC)	1,680,000	415
Woodchips (Thailand) GMT	1,500,000	110
Woodchips (Laos) GMT	300,000	12
Total	**3,480,000 tonnes**	**537 million**
Products Exported 2025 (t)		
Dissolving Pulp (DP)	323,000	261
Uncoated paper/Testliner (Recycled Linerboard)	257,000	110
Testliner (weighing 150gm/m^2 in rolls/sheet)	727,000	307
Total	**1,307,000 tonnes**	**678 million**



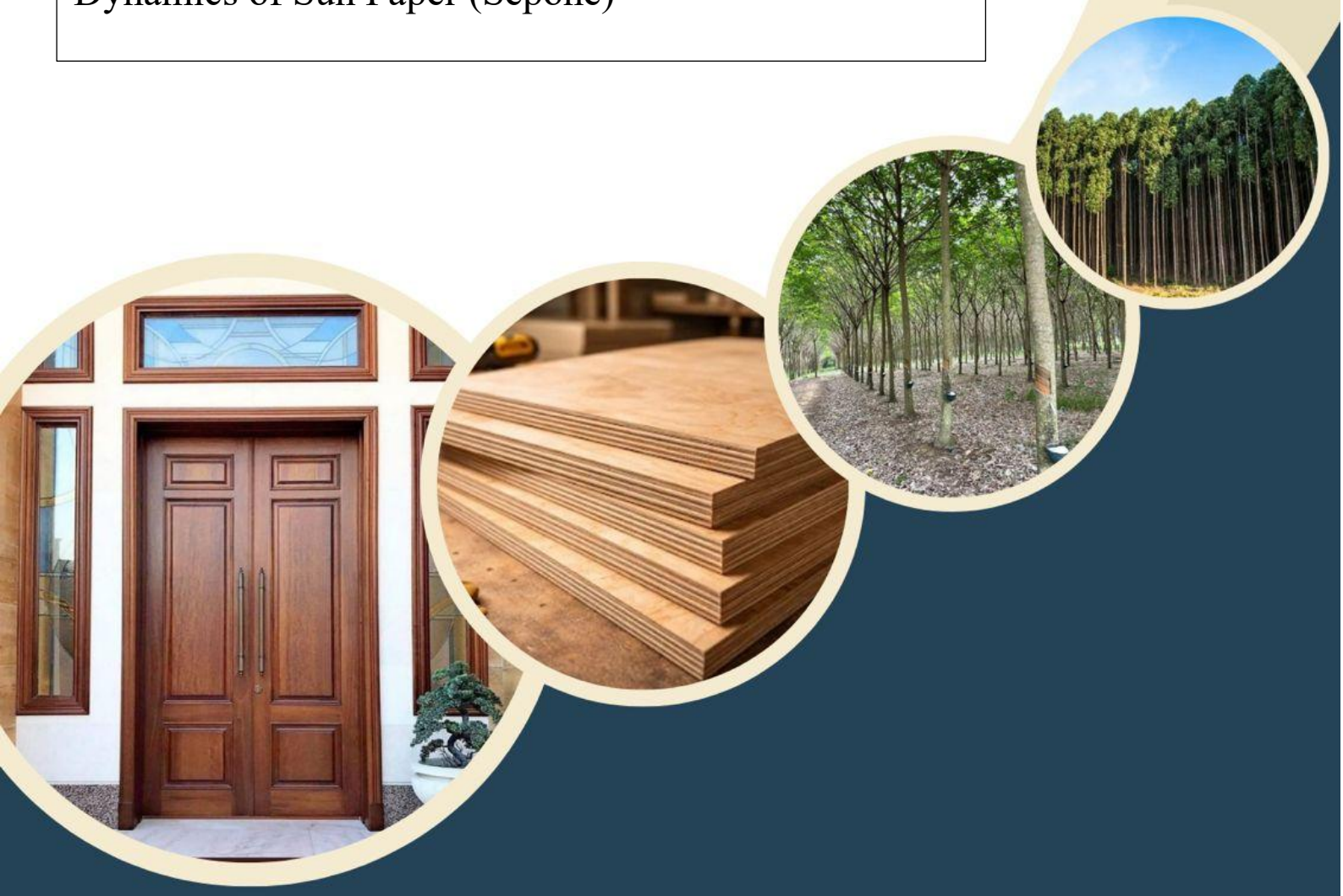
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PROJECT NUMBER: FST/2023/153

SUSTAINABLE EXPANSION OF FORESTRY AND WOOD PROCESSING IN LAOS AND AUSTRALIA

Report Title: Raw Material Needs and Production Dynamics of Sun Paper (Sepone)



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Griffith University | The University of Melbourne | Australian National University | Delivering for Queensland | Queensland Government

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Australian Government

Australian Centre for International Agricultural Research

Raw Material Needs and Production Dynamics of Sun Paper (Sepone)

Project Activity: **Market research and logistics**

Project Activity No. (if -applicable)

Date Submitted: **May 2026**

Prepared by

Stephen Midgley, Phouluang Chounlamounty, Vansy Phengthajaim and Khamsing Keothoumma

Collaborators: **Salwood Asia Pacific Pty Ltd**

Approved by **Project Leader, VALTIP 4**



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Declaration

This report has been prepared on behalf of the VALTIP 4 Project by a team from Salwood Asia Pacific Pty Ltd. and the contact person is Stephen Midgley.
Salwood Asia Pacific Pty Ltd ACN 108 926 656 is registered with the Australian Securities and Investments Commission (ASIC) and registered with the Registrar General's Office of the Government of the Australian Capital Territory.
This report is an outcome from ACIAR Project FST/2023/153 (VALTIP 4).

Disclaimer

This report is part of an independent, non-confidential study for the Lao forestry sector, designed to understand regional and national raw material dynamics. Salwood Asia Pacific Pty Ltd has prepared this report with appropriate care and diligence and has made all reasonable efforts to provide accurate and complete information while executing this assignment. Information relied on included public domain data, trade statistics, and valued insights from local growers and forestry officials. The preparation of this report relied in part, on information from documents and interviews held in national languages and translated into English. The resulting statements and conclusions contained in this report are provided in good faith. While this independent framework did not include direct consultations with Sun Paper, we view the company's perspective as vital to fully understanding these dynamics. We have made every effort to ensure the accuracy of this public data and warmly welcome the company's feedback, corrections, or updates to help refine our analysis.

Except for the specific responsibilities which by law cannot be excluded, no responsibility arising in any way whatsoever for errors or omissions (including responsibility to any person for negligence) is assumed by Salwood Asia Pacific Pty Ltd or its employees or associates for the preparation of this report.

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Currency:

At the time of writing (April 2026) the following exchange rates were in place:
Laos: USD = 21979
Vietnam: USD = VND 26.312
Thailand: USD = THB32.74
China: USD = RMB 6.83
Australia: USD = AUD1.40

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1. Corporate Background and Investment

1.1 Rationale

Sun Paper's plantation-based US$1.2 billion investment at Sepone is the largest ever in the Lao forestry and agricultural sector and is currently producing exports of wood fibre products exceeding US$750 million annually. It remains the largest grower of commercial eucalypts in Laos with an 'effective' stocked area of >30,000 ha under management and is the largest importer of eucalypt wood chips, purchasing some 1.5 million tonnes from Thailand valued at US$110 million at the mill gate.

1.2 Corporate Background

Shandong Sun Paper Industry Joint Stock Co., Ltd., founded in 1982 and headquartered in Shandong, China, is among the mid-level global producers in the pulp and paper industry. As the major subsidiary of Shandong Sun Holdings Group, the company operates substantial integrated production hubs in China's Shandong and Guangxi provinces - including a recently commissioned, multi-billion-dollar 'Forest-Pulp-Paper' project in Beihai producing bleached pulp and packaging grades and a planned strategic USD 3.2 billion expansion in Nanning, both based upon Chinese eucalypt wood fibre and eucalypt and acacia chips imported from Vietnam and elsewhere.

Sun Paper Holding Lao Co., Ltd., the company's USD 1.2 billion Lao investment in Sepone, is part of a strategy to create an overseas resource and manufacturing base to secure fibre supply and serve regional markets. These entities are both wholly owned subsidiaries of Shandong Sun Paper Industry Joint Stock Co., Ltd. which is registered with the Shenzhen Stock Exchange. Recent public filings indicate a steady year-over-year profit growth in 2025 of +4.8%. Both subsidiaries in Laos and Beihai operate under the overarching strategic framework of the mother company's 'Forest-Pulp-Paper Integration' project. It was within this context that the investment in Lao PDR was formalized through an investment agreement with the Lao government in 2009.

The Sun Paper project in Sepone is formally recognized and designated as a project supporting China's Belt and Road Initiative (BRI) in Laos and is considered a landmark model of BRI success in central Laos.

1.3 Historical Summary

The project's feasibility study was completed in 2008 after signing a MOU with the Government of Lao PDR and gaining approvals from the Government of China. The initial investment in the pulp mill became operational as a pilot on 20 May 2018 and has steadily expanded since to include a recycled pulp line and a containerboard mill. As of 2026, the cumulative realized investment has reached approximately USD 1.2 billion, transitioning the facility from a proposed site into a significant regional manufacturing hub.

2. Infrastructure, Production and Resource Requirements

2.1 Facility Description

The Sepone facility is integrated from material supply through to exported product and operates as a 'Circular Bio-Economy' loop, utilising waste streams to offset high operational costs and maximise output.

- **The Packaging Mill:** Processes ~1,200,000 tpa of imported wastepaper grades of OCC (Old Corrugated Containers) and AOCC (American Old Corrugated Containers) by purely mechanical means into approximately 1.0 million tonnes of high-quality packaging board via two high-speed production lines (PM1 and PM2).
- **The Chemical Pulp Mill:** A Bleached Hardwood Kraft Pulp (BHKP) or Dissolving Pulp (DP) 'swing' mill with a capacity of 350,000 - 400,000 tpa which utilises both Thai and Lao eucalypt wood. Some BHKP is used in the packaging mill and the rest shipped to China as virgin fibre.
- **The Recycled Pulp Mill:** In the separate mill, ~480,000 tonnes of raw AOCC is used to produce 400,000 tpa Unbleached Recycled Pulp (URP). This is dried and pressed into thick, rough bales and exported directly to China as a raw material for Sun Paper's other factories.
- **Chemical Fertilizer Plant:** Sun Paper's internal documentation lists a fertiliser plant with an estimated 100,000 t/a capacity producing NPK 15:15:15 blends which utilize organic lignin and sludge from the pulping process as a carbon matrix, enriched with imported chemicals (Urea, Phosphorus, Potassium, and Boron). While 25% is used for internal company plantations, 75,000 tonnes is reportedly available to the local market to support regional crops like cassava
- **Energy:** The facility is powered by an integrated complex with a total installed power capacity around 180-190 MW, including both coal fired[1] and a biomass thermal plant that incinerates wood waste and non-fibre residues from recycled paper. Sun Paper is understood to hold a majority interest (around 60 MW) in the Xe Lanong 1 Hydro project. In combination, the energy investments ensure 24/7 industrial operations, insulating the facility from local grid instabilities.

2.2 Resource Requirements

The mill depends on imported raw materials which totally dominate local procurement:

- **Wood Fibre:** At capacity, the chemical pulp mill requires 1.8 million GMT of usable fibre annually (equivalent to approx. 2.2 million tonnes of eucalypt roundwood (including bark). Based upon ongoing studies, domestic supplies comprise 20% and imports 80% of wood furnish.
- **Wastepaper (AOCC/OCC):** In 2025, the facility imported 1,680,000 tonnes of AOCC worth US$415 million. This higher grade of wastepaper is preferred because of its high fibre strength, cleanliness, and reliability of supply. The process yields an 80-85% fibre recovery rate, with the remaining 15-20% of sludge and plastic residues providing feedstock for the waste-to-energy loop. The primary AOCC supplier in the USA, Wonderful Paper Inc., is a wholly affiliated sourcing entity controlled by the founders and controlling shareholders of Shandong Sun Paper.
- **Thai Eucalypt Wood Chips:** The mill relies on an annual 1.5 million GMT import of eucalypt woodchips from Thailand. Valued at the mill gate $110 million in 2025 (~$76.60/gmt), the mill gate cost increases to US$92.60/GMT when handling and transport from Savannakhet to Sepone is included - a $45/GMT penalty over domestic wood supplies. The dominant supplier is the Khounkham Group (operating as Khounkham Logistics and Khounkham Industries), which functions as a dominant logistical bridge. There are unverified concerns among market participants about possible nominee ownership links between Chinese capital and Thai depots creating a separate supply entity operating with exclusive offtake arrangements with Sun Paper. The Chinese-

[1] In 2023, imports of Australian anthracite delivered via Da Nang 2023 reached 157,137 tonnes worth US$21,585,640 (~US$137.36/tonne).

manufactured chipping and handling equipment in these Thai depots is identical to the systems used within Sun Paper's Shandong operations and suggest a coordinated capital investment strategy by the Shandong Sun Holdings Group (the private parent entity).

- **Chemicals and Starch:** The chemical pulping processes require constant supply of sodium chlorate, caustic soda, sulfuric acid, and bleaching agents, comprising an estimated 5-8% of total operating costs. Imported mineral concentrates (urea, phosphorus, and boron) are combined with locally produced potassium to provide the feedstock for the fertilizer mill. The company is a major consumer (35,000 - 45,000 tpa) of high-specification modified industrial starches (primarily cassava) imported from Thailand or Vietnam and used for surface sizing and coating on PM1 and PM2. The annual combined import costs for these materials is about US$55 million.

3. Plantation Base, Smallholders and Wood Pricing

3.1 Plantation Estate

Reports of the magnitude of Sun Paper's plantation estate vary. Recent estimates of 61,000 ha appear to be exaggerations, with independent assessments from industry sources suggesting an 'effective' stocked area of closer to 28,000-30,000 ha (including both smallholders and the plantation resource purchased from Birla (Laos). In mid-2024, Savannakhet PAFO provided the following data for the Sun Paper plantation estate below (Table 1) suggesting 51,000 ha:

Year planted	Area of tree plantation (Ha)			
	Sun Paper Holding Lao Co	Savan Company (ex Birla)	Village contracts + smallholders	Total
2009	100.04			**100.04**
2010	492.07			**492.07**
2011	1,958.46			**1,958.46**
2012	480.21			**480.21**
2013	647.23			**647.23**
2014	677.95			**677.95**
2015	1,361.81			**1,361.81**
2016	1,122.47		50.77	**1,173.24**
2017	936.93		339.27	**1,276.20**
2018	964.20	2,545.18	464.32	**3,973.70**
2019	175.29	15,495.75	1,242.12	**16,913.16**
2020	552.43	2,293.83	2,712.17	**5,558.43**
2021	636.51	167.59	3,859.78	**4,663.88**
2022	720.89	594.14	4,666.66	**5,981.69**
2023	734.40	363.28	4,672.55	**5,770.23**
Sum	**11,560.89**	**21,459.77**	**18,007.64**	**51,028.30**

Table 1. Sun Paper's eucalypt plantation resource (ha) (courtesy Savannakhet PAFO, June 2024).

Sun Paper's competitiveness is supported by Lao domestic fibre remaining among the cheapest in the region, as shown in the table of mill-door delivered costs in neighbouring countries (Table 2)

Pricing Stage (Logs)	Lao (Eucalypt)	Thailand|(domestic) (Eucalypt)	Vietnam (Acacia)	Guangxi (Eucalypt)
Mill/Port Gate (Delivered)	40$/GMT	$40-$44/GMT	$45-$55/GMT	$78-$81/GMT
Harvest, Haulage & Margins	$25 -35/GMT (60 -85%)	$11-$12/GMT (20-25%)	$10-$15/GMT (20-30%)	$31-$41/GMT (38-%)
Grower Stumpage	**$5-15/GMT**	**$29-$32/GMT**	**$25-$40/GMT**	**$44-$51/GMT**

Table 2. Mill gate delivered (with bark) log prices in regional countries.

3.2 Smallholder Economics and Value Leakage

While the mill-door delivered cost of Lao domestic wood might seem reasonable (US$38/green tonne with bark in June 2024), in a regional context, the stumpage (standing value) paid to independent Lao outgrowers is low and can be as low as US$5/GMT, significantly lower than the $35-$40/GMT received by smallholders in Vietnam where there is persistent strong competition for acacia chips and a bonus is paid for straight, larger-diameter logs suitable for veneer peeling (US$45 - 50/ GMT). Access to land to expand concession areas for corporate plantings remains challenging and enhanced uptake by Lao smallholders remains a major corporate aim, however key structural issues include:

- **Stumpage Disparity:** Independent Lao growers receive a low stumpage - as little as $15/GMT with some records of $5 whereas farmers in Vietnam receive $35-$40/GMT. A refection upon the lack of competition.
- **Value Leakage:** Up to 87.5% of the mill-door price in Laos is absorbed by agents, traders, and logistical fees - a structural problem compared to all regional peers (Table 3).
- **Crop Competition:** Cassava currently offers an IRR of 25-40% with annual cash flow, far outperforming the 13-18% IRR of a 6-year eucalypt rotation.

Region	Harvesting, Haulage & Fees (%)	Grower / Stumpage (%)
Lao PDR (Sepone)	**60% - 87.5%**	**12.5% - 40%**
Thailand (Northeast)	40% - 60%	40% - 60%
Vietnam (Coastal)	30% - 45%	55% - 70%
Guangxi (China)	30% - 40%	60% - 70%

Table 3. Regional comparison of estimated proportion for delivered wood costs for grower stumpage and harvesting and haulage costs

4. Plantation Base, Smallholders and Wood Pricing

4.1 Export Profile

Almost all of Sun Paper's Lao production is directed towards affiliated companies in China. Chinese imports of pulp and paperboard from Laos (entirely from Sun Paper) exceeded US$678 million in 2025 (Table 4). Import data extracted from China Customs (values in USD million; volumes in '000 tonnes):

HS Code	Commodity	2023	2024	2025
4702.00.00	Dissolving Pulp	$292.4/ 337K	$289/ 334K	$261/ 323K

4706.20.00	Recycled Fibre Pulp (RBP/URP)	$10.0 / 26k	0	0
4805.24.00	Uncoated paper/Testliner (Recycled Linerboard)	$155 / 337k	$119/ 269k	$110 / 257k
4805.25.00	Testliner (weighing 150gm/m^2 in rolls/sheet)	$298/ 645K	$313/ 701K	$307/ 727K
	TOTAL EXPORTS (US$M)	**$755**	**$721**	**$678**

Table 4. Chinese imports from Sun Paper (Laos). Values in USD million; volumes in '000 tonnes (Source: China Customs)

For 2025, the average unit values for major exports were:

- Dissolving Pulp: Unit Value ~$808/tonne (CIF China).
- Testliner: Unit Value ~$422/tonne (CIF China).

4.2 Import Profile

In 2025, Sun Paper's import of raw materials totalled approximately US$ 597 million at the mill gate, comprising Thai woodchips ($110M), AOCC/OCC ($415M), coal ($21M), chemicals ($35-45M), cassava starch ($12-18M), and fertiliser feedstock ($4-6M) (Table 5).

Item	**Est Value 2025 (US$ mill)**
Thai Wood chips:	110
AOCC/OCC:	415
Coal:	21
Chemicals:	35 - 45
Cassava Starch:	12 - 18
Fertilizer Feedstock:	4 - 6
Total (approx.)	**597**

Table 5. Sun Paper's imports of raw materials 2025.

4.3 2025 Balance Sheet

Sun Paper's investment in the Sepone facility appears to be a net generator of foreign exchange for the Lao economy, with an approximate $138 million strategic surplus in 2025 (Table 6). However, the high 'leakage' for wood fibre, chemicals and technical labour emphasises that the project remains an industrial enclave, and strategies must be developed to retain more of the $597 million import costs within Lao PDR.

Category	**Value (US$ Millions)**
Reported Exports (to China)	$678
Other Exports (ASEAN/West)	$75
TOTAL EXPORTS	**$753**
Reported Imports (Wood/AOCC/Coal)	$546
Chemicals & Starch Imports (est)	$57
Foreign Labour Cost (est)	$12

Category	Value (US$ Millions)
TOTAL IMPORTS	**$615**
STRATEGIC SURPLUS	**+$138**

Table 6. Balance of Sun Paper's imports and exports

5. Logistics

The Sun Paper facility is built upon a high-volume "enclave" model, where the majority of raw materials such as woodchips and wastepaper (AOCC) are imported, and finished products are exported to China via Da Nang port requiring road transport of 250 km and cross border procedures. Sun Paper relies heavily on efficient transit through Vietnam and a complex land-link with Thailand for import of eucalypt woodchips. Whilst there are clear regulatory procedures for such trade, industry informants suggest that entrenched contractor "arrangements" and logistical bottlenecks are now major considerations.

5.1 Logistics via Da Nang.

Imports of AOCC/OCC from North America

- **Theoretical Procedures:** Under the Vietnam-Laos Transit Agreement and the GMS Cross-Border Transport Agreement, AOCC is treated as "transit cargo". Containers should land at Da Nang and move under a "Transit Customs Declaration" (HQ/2015-XK) with electronic seals (e-seals) directly to the Lao Bao - Dansavanh border.
- **Reality:** While the Single-Stop Inspection (SSI) model at Lao Bao aims to streamline clearance, weight reconciliation remains a primary hurdle. Any minor discrepancy between the maritime weight recorded at Da Nang and the border weight triggers a "Red Lane" physical inspection, often extending wait times to 24 - 48 hours.

Exports of Processed Products (Linerboard and Pulp)

- **Theoretical Procedures:** Finished products, including Testliner (HS 4805.24/25) and chemical/dissolving pulps (HS 4703/4702), are containerized at Sepone and trucked to Da Nang for sea shipment to China.
- **Reality:** Production flow through the Nanning and Guangzhou Customs Districts in China, arriving via maritime skip-shipments from Central Vietnam.

5.2 Logistics via Thailand

Sun Paper relies on an annual import of approximately 1.5 million green metric tonnes of *Eucalyptus* woodchips from Thailand to supplement its fibre needs.

Imports of Woodchips from Thailand

- **Theoretical Procedures:** Under the Thai Plant Act B.E. 2518, woodchips (HS 4401.22) are a "Restricted Export." Theoretically, every shipment requires a Phytosanitary Certificate (PSC) from the Thai Department of Agriculture, and a corresponding Lao Import Permit issued 15 days in advance.
- **Reality:** In practice, the requirement for a PSC is often bypassed or consolidated into "batch clearances." Because the Thai side follows a "no requirement, no certificate" policy, and Lao officials may prioritize investment "goodwill" over strict phytosanitary enforcement for industrial raw materials, a regulatory mismatch occurs. This gap is frequently managed by middlemen who charge "facilitation fees" to ensure trucks move through the Savannakhet Friendship Bridge 2 in 2 - 4 hours.

5.3 Fees, and Facilitation

As an incentive to investment, Sun Paper successfully negotiated with the Government of Laos to have all imports and exports made free of tariffs. Financial benefits to Laos lie with provision of wood from

domestic growers, employment and a range of fees. The "arrangements" between third-party contractors and supply managers are a defining feature of Sun Paper's supply chain.

- **Official Fees and Taxes:** Standard transit fees at Lao Bao (~$20-$50 per container) and bridge tolls at Savannakhet ($15 - $25 per truck) are secondary to the high cost of bonded trucking. Sun Paper is largely obliged to use Vietnamese logistics firms for the Da Nang route due to GMS road permit restrictions.
- **"Considerations" and Facilitation:** Informal payments are common to avoid the "time-consuming" specialized inspections for recycled pulp (to prove it is not restricted "waste") or to bypass the lack of formal phytosanitary documentation for woodchips.
- **Impact on Growers:** In Laos, while the mill gate price is stated at USD 40/tonne, the entrenched contractor layer consumes much of this value through harvesting and haulage and various "imposts." This leaves small domestic growers with little profit, encouraging a switch to more profitable crops like cassava.

5.4 Measurement and Valuation of Imports/Exports for Customs

Accurate tracking of 1.5 million tonnes of fibre and finished goods is managed through a multi-point weighing system.

Weighing Points:

- **Inbound Woodchips:** Weighed at the chipping depot (for grower payment), the Thai Exit (Mukdahan) for official export records, and the Lao Entry (Savannakhet) for import verification.
- **Inbound AOCC / Outbound Products:** Weighed at the Port of Da Nang and again at the Lao Bao–Dansavanh border for weight reconciliation.

Customs Valuation:

- **Thai Side:** Valuation is recorded as FOB (Free on Board) at the Mukdahan border. This value includes stumpage, chipping costs, and transport to the bridge.
- **Chinese Side:** For imports from Laos, China tracks "Importer Location" (often Sun Paper's headquarters in Shandong) and "Customs District" (the physical entry ports like Qinzhou or Nansha).

6. Threats and External Influences

6.1. Increasing regional competition for wood fibre

Along with geopolitical disruption, fibre availability is evolving as a dominant risk factor for the pulping industry in the region (Fastmarkets, 2026). The Indonesian "Permit Crisis" of late 2025, which saw 22 forestry licenses revoked due to alleged environmental links to flooding, has turned the Southeast Asian woodchip sector into an attractive seller's market. Faced with a supply crises that is likely to be long-term, companies in Indonesia such as APRIL and APP are looking aggressively toward regional imports to maintain BHK pulp production (Table 7). This brings tension as Sun Paper will need to compete for its supply of Thai fibre with large Indonesian mills who set the regional floor price. Indonesian wood chip imports have doubled from 2023 to 1.79 BDMT in 2025 (Table 7). If forestry licence revocations in Indonesia become permanent, it would increase competition for regional woodchips, foster price increases and ultimately result in higher pulp prices. In addition, Fastmarkets (2026) observed that as the volume of the regional market pulp demand continues to grow, the steady demand for virgin fibre in China leaves room for growth in domestic chip markets, imported chip markets and for imported pulp. However, pulp prices are set by global supply and demand and may not change, placing tension upon the pulp mills' profit margins.

Source Country	Est.Volume (BDMT[2])	Est. Value (USD)	Notes 2025
Vietnam	1,250,000	$228 Million	Dominant supplier; diverted volume from China to Indonesia.
Thailand	380,000	$69 Million	Direct competitor to Sun Paper; diverting volume from land-routes to maritime ports.
Malaysia	160,000	$29 Million	Consistent supply of rubberwood and acacia chips.
Totals	**1,790,000**	**$326 Mill**	Approx. 2.8% volume increase from 2024.

Table 7. Regional Woodchip Exports to Indonesia (2025)[3]

Competition for Thai Fibre

The rise in Indonesian imports creates several challenges for the Sun Paper mill: logistics costs, wood availability and wood costs.

Plantation growers and wood traders in Thailand have options for selling wood fibre:

- The Thai domestic markets for pulp, plywood, MDF and other panels and biomass;
- Sale to Indonesia; road transport to Thai ports (Laem Chabang) for sea shipment to Sumatra;
- Sun Paper (Sepone); road transport of up to ~450 - 500km via the Mukdahan-Savannakhet border crossing.

As Indonesian demand strengthens, the FOB at Thai ports effectively sets the price for all Thai wood. If the port offers a higher margin, chip-mill operators will prioritize maritime buyers over the Sepone border trade. This makes the possibility of "Nominee Ownership" of depots even more critical (the issue raised in Section 2.2); without control of the infrastructure, Sun Paper is likely to lose wood to Indonesia.

Given that 80% of Sun Paper's wood chip requirements are sourced from Thailand, this new situation brings tension because Sun Paper in Sepone is no longer just competing with other mills in Thailand; it is competing with the maritime export market, where the large Indonesian companies are setting the regional floor prices.

In addition to wood availability, another consequence of this new competition is likely to be an increase of the delivered cost of woodchips to Sepone, influenced by the FOB price at Thai ports (Table 8Table 7) .

Activity	Est. Cost (USD/GMT)	Competitive Pressure
Stumpage (to Thai Grower)	$22.00 - $28.00	Rises as farmers demand "Port Parity" pricing.
Harvest/Chipping/Handling	$17.00 - $23.00	Increasing due to labour competition.

[2] BDMT = Bone Dry Metric Tonnes. Prices averaged roughly USD $182.50/BDMT (Delivered/CIF) throughout 2025.

Activity	Est. Cost (USD/GMT)	Competitive Pressure
Transport (to Sepone)	$15.00 - $22.00[4]	Border fees and fuel act as a "logistics tax."
Total Landed (Sepone)	**$54.00 - $73.00**	**Must stay below Thai FOB (~$75-$85) to remain viable.**

Table 8. Estimated cost of Thai wood chips delivered to Sepone

The strong Indonesian demand is projected to be "long-term" and will keep Thai prices high through 2026 and beyond. Fastmarkets (2026) predicts that Indonesian demand will push Thai export prices toward $85–$90/GMT. This changing competitive situation is likely to encourage Sun Paper to review its 80:20 import-to-domestic wood supply ratio.

Outcomes for domestic supply of wood fibre

Sun Paper currently pays a delivered mill-gate price of $40/GMT for domestic Lao wood - significantly lower than the $54-$73/GMT for Thai wood. This low price for domestic wood relies on low stumpage price offered to Lao growers (as low as $5/GMT for some smallholders). This brings a risk that Lao growers will switch to more profitable crops like cassava or rubber.

Because of higher prices for Thai woodchips and the possibility of losing wood to Indonesia, Sun Paper may be forced to offer a more competitive $30/GMT stumpage, bringing the domestic mill-gate price to roughly $60-$65/GMT. This remains significantly lower than the $80+ they will likely pay for Thai wood in a market influenced by Indonesian supply shocks.

6.2 The 2026 Fuel Crises.

Laos depends upon imports of fuel from Thailand and to a lesser extent Vietnam. Diesel prices in Laos have surged by up to 50% in recent weeks. Historically, Thailand has been the primary supplier of both woodchips and refined diesel to Laos. The plantation and forestry sector depends on diesel for forest operations and long-haul freight. The current fuel crisis has had an impact on the Sun Paper Sepone facility and broader plantation sector in many ways; cost and availability of fuel, cost of logistics, willingness of Thailand and Vietnam to maintain fuel exports, cost of harvesting and haulage for smallholder growers.

Thailand has recently undergone a severe price increase for diesel with prices increasing by 6 baht/litre, pushing prices to nearly 39 baht/litre. The Federation of Thai Industries (FTI) reported that this immediate price shock increased domestic transport and logistics costs by 20% to 25%. Subsequently, Thailand is carefully managing its fuel resources and cautiously managing exports.

Transporting woodchips from Thai plantations to Sepone has become more expensive. Not only are the baseline freight rates up 25%, but Thai haulers appear reluctant to run cross-border consignments into Laos. If a Thai truck cannot guarantee it can refuel for the return trip, it either won't take the job or must carry its own fuel reserves, reducing its payload capacity for woodchips.

The mill's 80% wood fibre dependence on Thailand will remain for the foreseeable future . Long-haul heavy truck transport of woodchips is among the most diesel-intensive logistics operations in the supply chain.

In supply chains such as Australia, shorter haul distances, higher payloads (like B-Double configurations), and a higher baseline cost for domestic fibre can result in fuel accounting for a relatively modest 13% of

[4] Standard road haulage operating costs for the region are between $0.02 and $0.04 USD per tonne-km for 27 tonne payloads giving a total transport cost of $16 per tonne for a notional 400 km journey. To this, border costs and the return costs of empty trucks should be added.

the total delivered cost. However, for the shipments from Northeast Thailand to Sepone, fuel accounted for 48% of the transport costs in February, 58% in April and 51% in early May.

A diesel cost increase in Thailand directly inflates the delivered cost of Thai woodchips and freight costs have risen by an estimated 25%. Even a modest per-tonne cost increase, across 1.5 million tonnes of annual chip imports can have a financial impact. Hauling chips or roundwood 300-500 km by road is pushing the extreme upper limit of a viable catchment area for a modern mill.

Country	Diesel Price (Early Feb 2026)	Diesel Price (Late April 2026)	Approximate Increase
Laos	~LAK 19,060 / litre	~LAK 47,600 / litre	**+ 150%**
Vietnam	~VND 19,270 / litre	~VND 39,660 / litre	**+ 105%**
Thailand	~THB 30.00 / litre (Capped)	~THB 38.94 / litre	**+ 30%**

Table 9. Variation in regional fuel costs impacts delivered costs of wood.

Heavy Thai trucks do not have to refuel in Laos as they can complete the 460-kilometre return trip in Laos on a single tank of fuel. The substantial difference in price changes between Thai diesel (+30% increase), Vietnamese diesel (105%) and Lao diesel (+150% increase) appear to have fostered a grey economy (Table 9). There have been reports of smuggling fuel from Thailand; a Thai truck entering Laos with a 600-litre tank only needs 185 litres for the return trip to Sepone . The remaining 400+ litres could be valuable on the Lao black market. A similar situation could rise for transport to and from Vietnam. A woodchip shipment might become an avenue to trade fuel across the border. This might result in restrictions for outgoing trucks to depart with full tanks.

Shipments through Vietnam also face challenges. Sun Paper moves an estimated 2.5 million tonnes of cargo (1.2M inbound AOCC/chemicals/coal + 1.3M outbound finished product) through Da Nang each year. Assuming standard heavy articulated trucks carrying approximately 30 to 35 tonnes per load, this requires roughly 75,000 to 80,000 truck round-trips per year, or over 200 heavy trucks crossing the Lao Bao border every single day, dedicated solely to Sun Paper's operations. This represents a substantial cross-border shipment of fuel.

6.3. Competition for North American AOCC/OCC

The North American pulp and paper sector has undergone a significant structural shift toward recycled fibre, particularly the OCC and AOCC grades which supply the Sun Paper (Sepone) mill. The "recycled paper" segment is projected to be the fastest-growing raw material category in the USA through 2033, outpacing traditional wood-based pulp[5]. Major companies (e.g., Sonoco, Smurfit WestRock) have invested hundreds of millions to convert virgin or mixed-fibre mills into 100% recycled operations. This transition is no longer a "trend" but a core strategic realignment driven by domestic e-commerce demand and sustainability mandates.

There is a growing competitive tension in the trade of AOCC which being kept within the U.S. to feed domestic mills, leaving less volume available for international sourcing entities such as Wonderful Paper Inc (Table 10). In addition, national average prices for U.S. OCC have shown steady increases in early 2026 which will result in price increases for Sun Paper.

[5] Straits Research. Recycled Paper Market Size, Trend Analysis Forecast by 2033. Published April 10, 2025.
SkyQuest Technology Consulting. Pulp and Paper Market Size, Share, and Growth Analysis Forecast (2026–2033). December 24, 2025

Factor	North American Trend	Impact on Sun Paper (Laos)
Capacity	Massive conversion to 100% recycled mills.	**Negative:** Less surplus fibre for export.
Price	Increasing domestic floor price for OCC.	**Negative:** Higher costs for the Sepone mill.
Fiber Quality	U.S. mills keeping the "cleanest" AOCC.	**Negative:** Sun Paper may face higher "yield loss" or contamination.
Export Volume	Significant double-digit declines.	**Threat:** Sourcing through Wonderful Paper Inc. becomes more difficult.

Table 10. Market Impact for North American AOCC/OCC on Sun Paper Laos

7. Workforce and Employment Opportunities

The Sepone facility operates with approximately 450–600 Chinese staff (senior management, chemical engineers, PM operators, and maintenance specialists) and 1500 Lao staff in the mill and in the field in logistics, mill shift supervisors, basic mill operations, nursery management, plantation supervision, plantation labour, security, and administrative support (Table 11).

If the costs of the Chinese workforce are viewed as a service import to the Project valued at an estimated US$12 million annually, as salaries are often paid in CNY into Chinese accounts, this would represent a capital outflow from the Lao project.

Sun Paper has a stated ambition to build a skilled, bilingual Lao workforce and the move towards a predominantly Lao workforce will use the 'Master Apprentice' training system successfully used for the China–Laos Railway. Training for Lao staff has been a priority and so far some 108 Lao students have been trained in China; 55 students at the Yunnan Forestry Technological College (云南林业职业 技术学院) for Chinese language and vocational skills in forestry and 53 students at the Yibin Vocational and Technical College (宜宾职业技术学院) where students spend the first two years studying Chinese language and electromechanical/electrical engineering basics before returning to Sun Paper factory in Laos to complete their third year of practical training under the guidance of Chinese technicians

Staff Category	Estimated Number	Primary Roles
Chinese Staff	**450 – 600**	**Management & Technical:** Senior leadership, chemical engineers, PM (Paper Machine) operators, and maintenance specialists for the 185 MW power plant.
Lao Staff	**1500**	**Operational & Field:** Logistics, nursery management, plantation labour, basic mill operations, security, and administrative support.

Table 11. Estimated staffing for the Sun Paper investment.

8. Future Plans

Sun Paper intends to establish Laos as a primary global fibre and manufacturing hub and has proposed the following strategic targets:

- **Phase 2 Expansion:** A further $600 million investment at Sepone to reach an integrated capacity of 1.5 million tonnes of pulp and 1.5 million tonnes of paper.
- **Geographic Diversification:** Exploration of similar integrated models in Attapeu and Bolikhamxay, with indicative investment proposals around US$1 billion each.
- **The 100,000-Hectare Goal:** Expanding the managed estate to 100,000 ha (30,000 ha concession and 70,000 ha under contract farming) to achieve full domestic fibre security and eliminate the $15 - $33/GMT import penalty.
- **Social Infrastructure:** Plans for a hospital and polytechnic to support workforce localisation, though these remain at proposal stage.

9. Policy Considerations

To ensure that Sun Paper's USD 1.2 billion investment remains profitable for the company and offers meaningful economic benefits for Lao PDR, and to secure the resilience of the Sun Paper supply chain against current and imminent market threats, the following policy interventions can be considered:

9.1 Addressing External Supply Chain Threats

- **Insulating Against Fuel Shocks and Fibre Competition:** The 2026 fuel crisis has caused Thai diesel prices to surge by 50%, heavily penalizing the long-haul transport of Thai woodchips. Simultaneously, strong Indonesian demand is projected to push Thai export prices toward $85-$90/GMT (FOB). To survive this margin compression, policy frameworks must urgently encourage Sun Paper's goal of a 100,000-hectare domestic plantation estate to replace its unsustainable 80% reliance on Thai fibre imports.
- **Adapting to AOCC/OCC Scarcity:** As North American mills transition to 100% recycled operations, they are retaining the highest quality AOCC, leading to higher costs and lower yield qualities for Sun Paper's recycled packaging lines. It is likely that lower wastepaper grades will have lower pulp recoveries and increased effluent. Industrial policy should explore incentives for waste-paper recovery networks within the GMS (Greater Mekong Subregion) to dilute the reliance on North American AOCC.

9.2 Expanding the Domestic Outgrower and Smallholder Base

Given the severe limitations on securing large-scale land concessions in Lao PDR, expanding the smallholder and outgrower base (aiming for 70,000 ha under contract) is essential for Sun Paper's long-term success. The following actions are suggested to increase domestic engagement:

- **Implement Direct Procurement to Stop Value Leakage:** Currently, brokers, agents, and logistical fees absorb between 60% and 87.5% of the mill-door price at Sun Paper. Policy could facilitate the creation of district-level log depots, allowing smallholders direct access to the supply chain to bypass intermediary 'skimming' and capture a larger share of the wood value.
- **Urge Competitive Stumpage Pricing:** Independent Lao growers currently receive low stumpages, making eucalypts uncompetitive against cash crops like cassava, which offers high returns. Sun Paper can be encouraged to adopt procurement policies which will offer an attractive minimum

stumpage to successfully incentivize farmers while keeping delivered mill gate below the cost of Thai imports.

- **Accelerate Land Tenure Security:** Smallholders require formal, secure land titles to enter into legally binding, long-term supply contracts. Expediting the titling process reduces the risk of distress renegotiations during economic shocks and provides farmers with the confidence required to commit to a 6-year eucalypt rotation. Government of Lao resources could be directed towards this end.
- **Provide Technical support for Productivity Extension:** Government agencies and Sun Paper can collaborate to provide the technical support needed for smallholders to increase the current low growth rates. Increasing yield will optimise the use of the limited land base and ultimately reduce the delivered cost of wood fibre.

9.3 Preparing for Future Investment

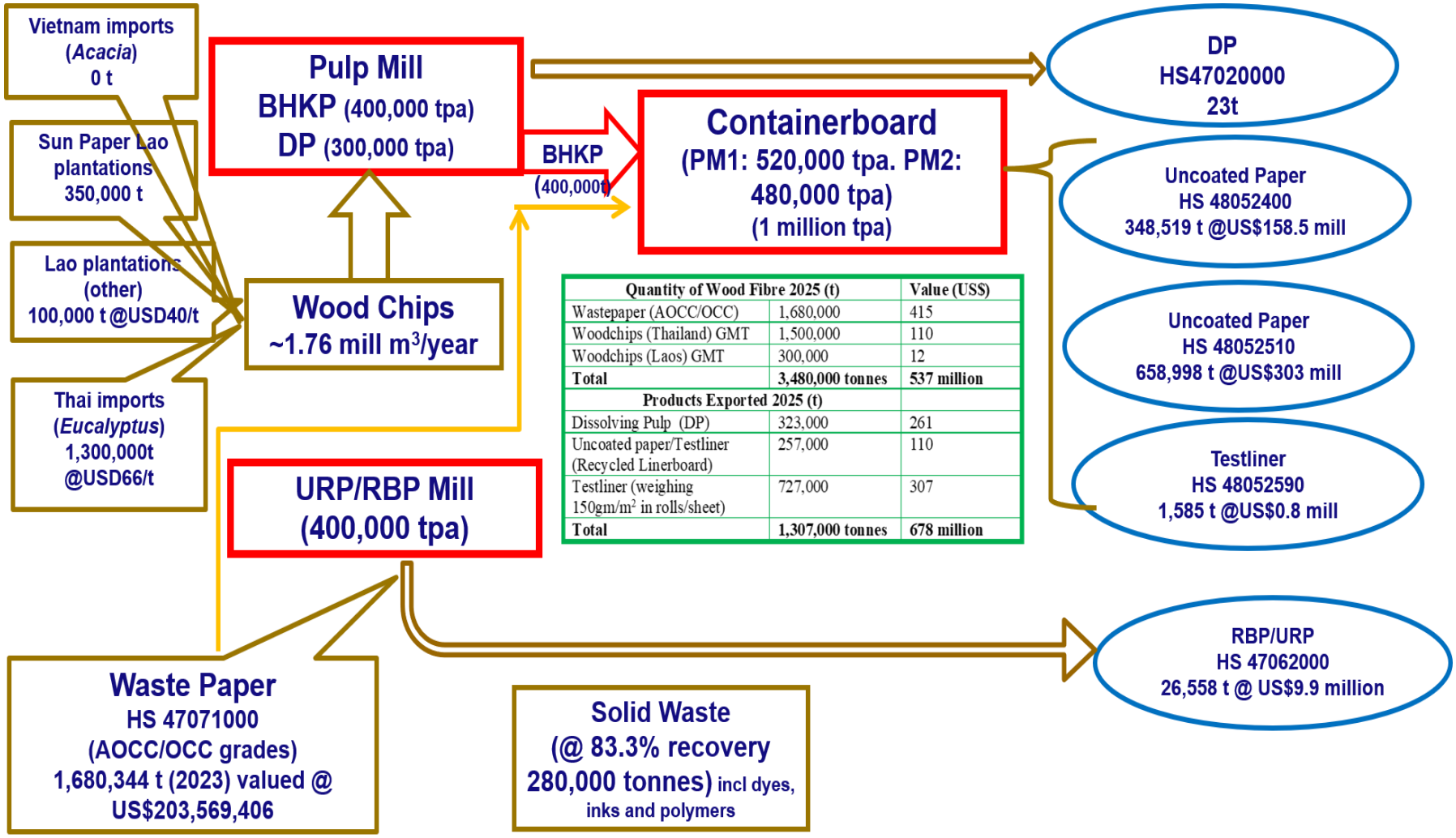
- **Prepare for future Investment.** The Sun Paper facility has grown to become a successful commercial model in rural Lao PDR. The company proposes further pulp-related investments in Lao PDR using the existing mill as a model. What can be learnt from the current investment to ensure that future investments remain profitable for the company and of benefit to Lao PDR? Detailed assessment tools are available for such studies. For private sector investments, the IFC utilizes the *Anticipated Impact Measurement and Monitoring* (AIMM) framework and the ADB uses its *Guidelines for the Economic Analysis of Projects*.



Sun Paper plantations, Sepone.

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Quantity of Wood Fibre 2025 (t)		Value (US$)
Wastepaper (AOCC/OCC)	1,680,000	415
Woodchips (Thailand) GMT	1,500,000	110
Woodchips (Laos) GMT	300,000	12
Total	**3,480,000 tonnes**	**537 million**
Products Exported 2025 (t)		
Dissolving Pulp (DP)	323,000	261
Uncoated paper/Testliner (Recycled Linerboard)	257,000	110
Testliner (weighing 150gm/m^2 in rolls/sheet)	727,000	307
Total	**1,307,000 tonnes**	**678 million**



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