



Papua New Guinea (PNG) is an important regional producer with significant potential for yield uplifts and increase in national supply

Quick facts: PNG is the 5th largest producer in Asia

Production¹
'000 tons, 2014

56

Production share
Global & region

16th in world
5th in Asia

Coffee land¹
'000 hectares, 2014

52

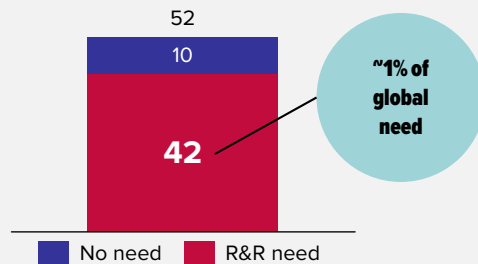
Varieties
Arabica-Robusta

~95% A
~5% R

R&R need: ~90% of total land is in need of R&R

SHF land in R&R need out of all land

'000 hectares



Drivers of R&R need:

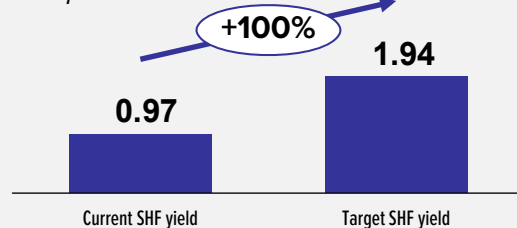


Need is primarily driven by old trees and bad current practices. The recent outbreak of Coffee Berry Borer, an endemic beetle, increases the R&R need

Uplift potential: Significant uplift potential given low current SHF yields

Current SHF yield & potential uplift²

Tons per hectare



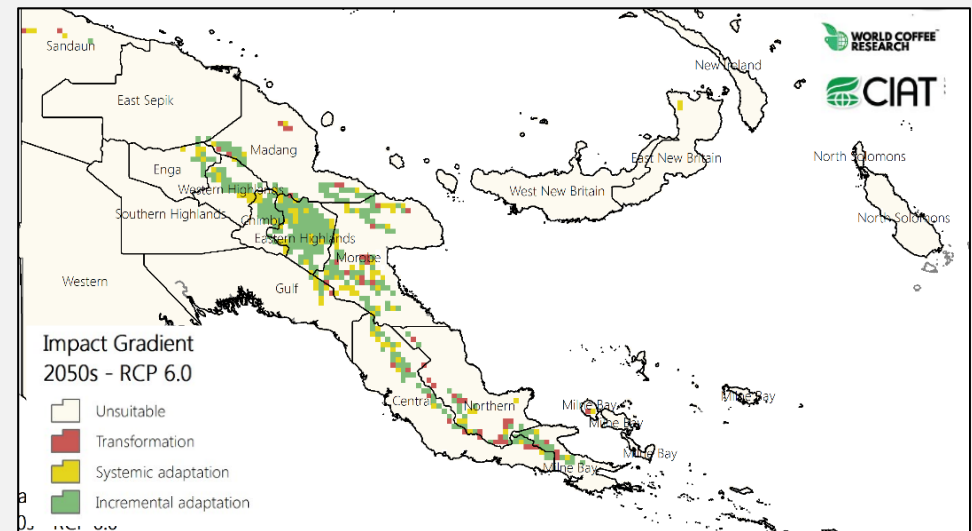
Potential increase in supply

~20-90%

Total national supply could increase ~20-90% if R&R and GAP is implemented on all SHF land in need of R&R³

Viability: Climate change is not forecast to impact significantly

Suitability map



- Climate change is not forecasted to impact PNG significantly though individual areas might require systemic adaption, and in few cases, transformation

Other viability considerations

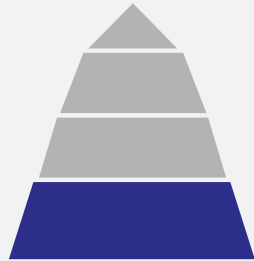
- No national or regional census have been held in Papua New Guinea so there is little comprehensive information on the coffee sector
- The lack of road infrastructure hampers the growth of the coffee sector and increases the difficulty of implementing R&R programs

Notes: (1) No formal mapping of coffee growing areas in the country has been undertaken. FAO data is highly uncertain and land under coffee is likely to be underestimated. (2) The current yield is calculated on the basis of SHF production divided by SHF land area. Given that coffee growing area is likely underestimated, SHF yields are likely estimated too high. (3) Rounded to the nearest 5%, estimate assumes that R&R and GAP increase yields with 100%, and the range reflects a 25-100% R&R success rate. Our interviews suggest very low yields that could be doubled. Source: FAO Statistics database; ICO statistics; USDA, Annual Coffee Report, 2017; Daniel Giovanni and John Hunt, Papua New Guinea: Strategic Assessment of the Coffee Sector, 2009; CIC, The Papua New Guinea Coffee Handbook, 2016; Dalberg Interview



Papua New Guinea has structural deficiencies that hamper the development of the coffee sector

Farmer segmentation: Most SHFs are at the bottom of the pyramid



SHFs
'000

~500 – There is no population census, hence high uncertainty on the number of SHFs

SHF land
'000 hectares

47 (~90% of national land) – farm size typically <1 hectare)

SHF production
'000 tons

45 (~95% of national production)

Assessment of
SHF orgs.

Weak and underperforming coop sector – ~5% of SHFs are linked to coops

Links to market

SHFs have no formal links to market and sell their unprocessed coffee in road markets

National production is dominated by SHFs

The majority of SHFs are in disconnected value chains, with weak and erratic links to market. SHF orgs. are generally mismanaged and lack capacity

Enabling environment for R&R: Weak enabling environment

Political environment



- Coffee share of GDP: N/A [Coffee share of exports: 1.6% (2015)]
- Observers describe the Coffee Industry Corporation (CIC) as a bureaucratic and inefficient organization
- The lack of roads is a bottleneck for productivity and exports

Availability of inputs



- No centralized nurseries
- Seeds are produced by farmers themselves using traditional techniques, with no quality control
- SHFs have little, or no access, to other inputs (e.g. fertilizers)

Availability of finance



- SHFs have limited access to long-term credit. Banks or credit institutions do not lend to unorganized SHFs
- Exporters / private sector actors can pre-finance SHFs, but this source of finance is inefficient for R&R

Knowledge availability



- Most SHFs do not receive any form of TA
- PNG is the most linguistically diverse country in the world, with over 850 languages spoken. This diversity, together with the lack of infrastructure, makes the providing of TA to SHF difficult and costly

Examples of R&R programs: Past government R&R programs were mostly unsuccessful

- **CIC and Government - Industry-wide renovation pruning** (late 1990s) – The purpose of the program was to increase productivity, but, according to interviews and observes, the program was mismanaged and achieved poor results
- **Government - National Agriculture Development Plan** (2006 – 2011) – The program aimed at “*Injecting new life*” into agriculture and the coffee sector, but was mismanaged and abandoned after five years
- **The world Bank - Productive Partnership in Agriculture** (2010 – 2019) – The purpose of the program is to improve the livelihoods of coffee and cocoa SHFs through improved productivity. To date, the program has focused more on cocoa renovation