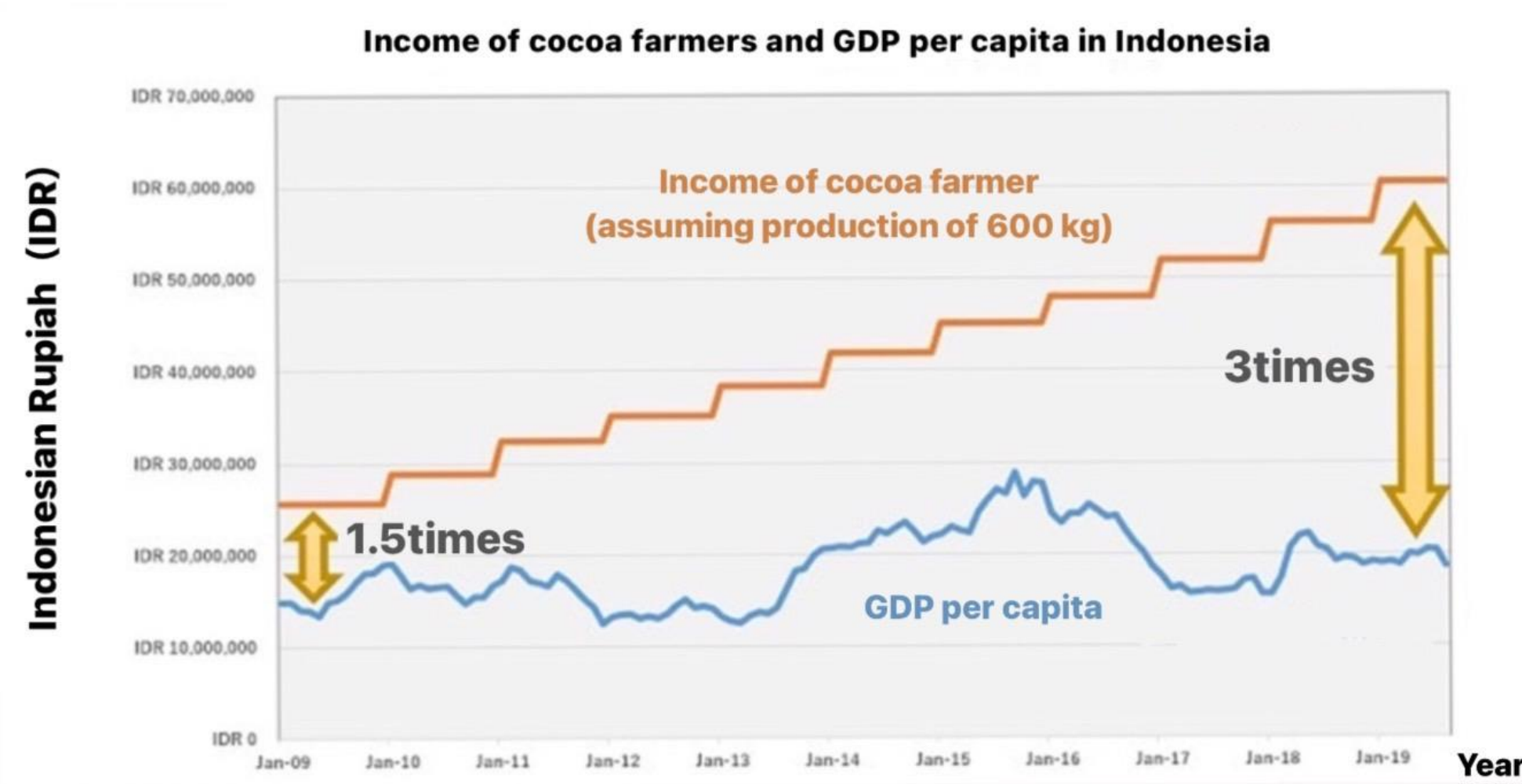


Creating New Cacao Markets to Achieve Sustainable Cacao Production

Background

- **Low wages** for cacao growers
- **Decreasing number of cacao producers**



(Quoting from Dari K HP)

- Some excellent physiological effects ※¹
- Low blood pressure, preventing arteriosclerosis, beauty effects, improving allergies, activating the brain, improving bowel movements, reduce the incidence of depression
- However, almost no cacao consumption in cacao producing countries.
- Moreover, cacao production is decreasing.

Purpose

- Create "**new cacao markets**"
- By growing and eating cacao themselves, farmers will become aware of appeal of cacao.
- Farmers themselves do the processing directly.
- Hope that this will become a new source of income and solve the problems of cacao production.

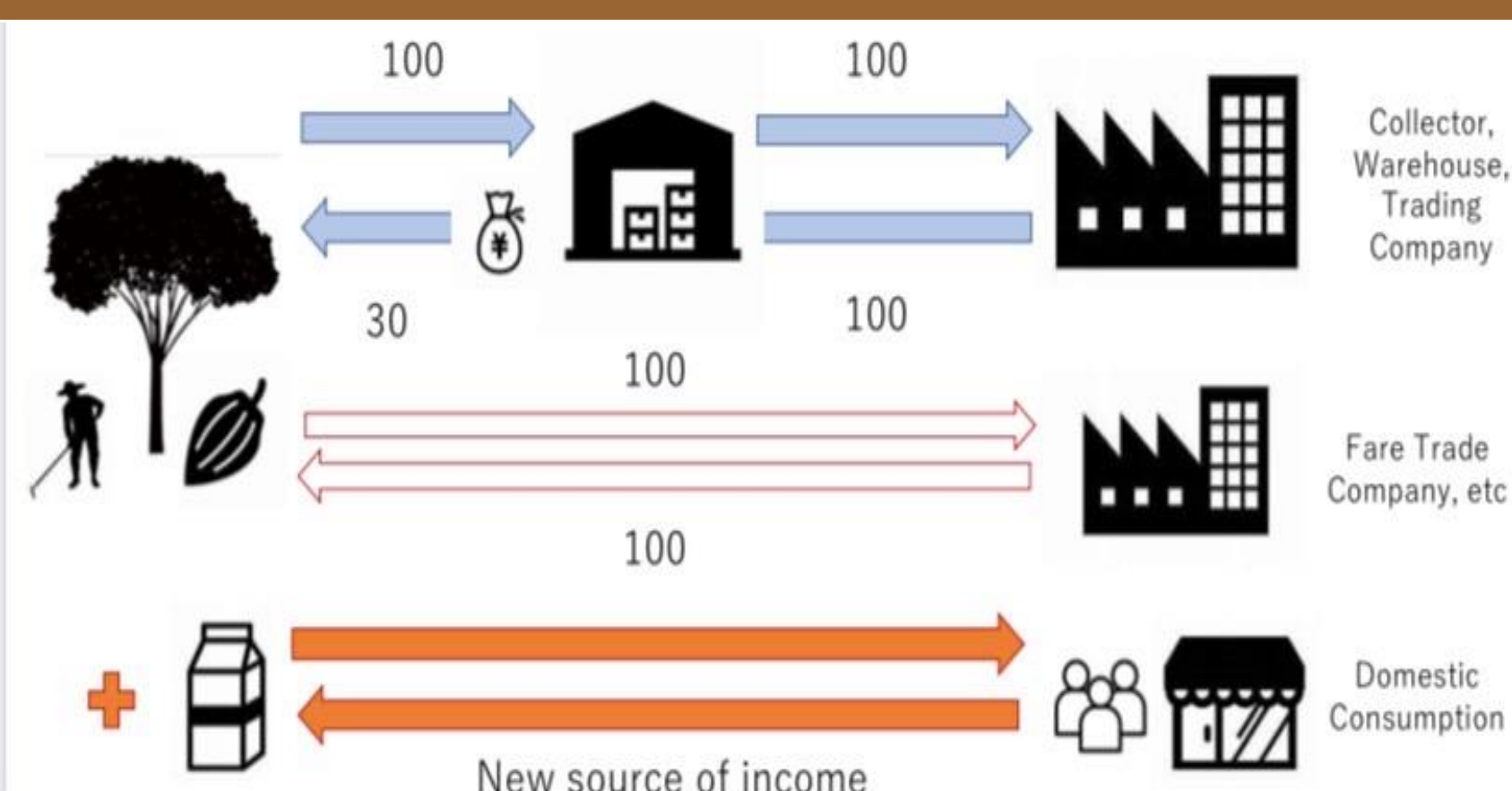
Study 1 : Visiting cacao-producing regions

- Indonesia, Vietnam, Thailand, Australia
- Most of the Farmers **never made chocolate**
- The warm climate causes chocolate to melt,
- Not enough knowledge how to process cacao.



A Sustainable System

- Prevent middleman exploitation
- Encourage cacao farmers to become independent



Study 2 : New Market Development

• Cacao Drink

- Can spend as little as possible on initial costs
- Can be easily stored locally with minimal processing
- No worry about melting



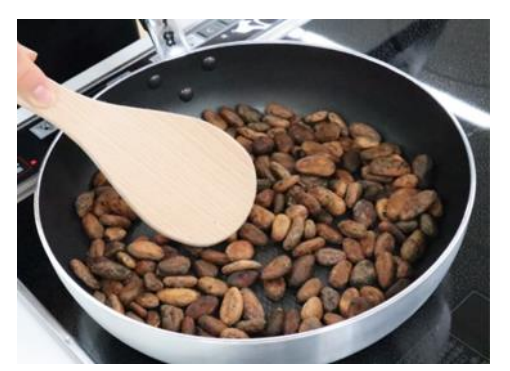
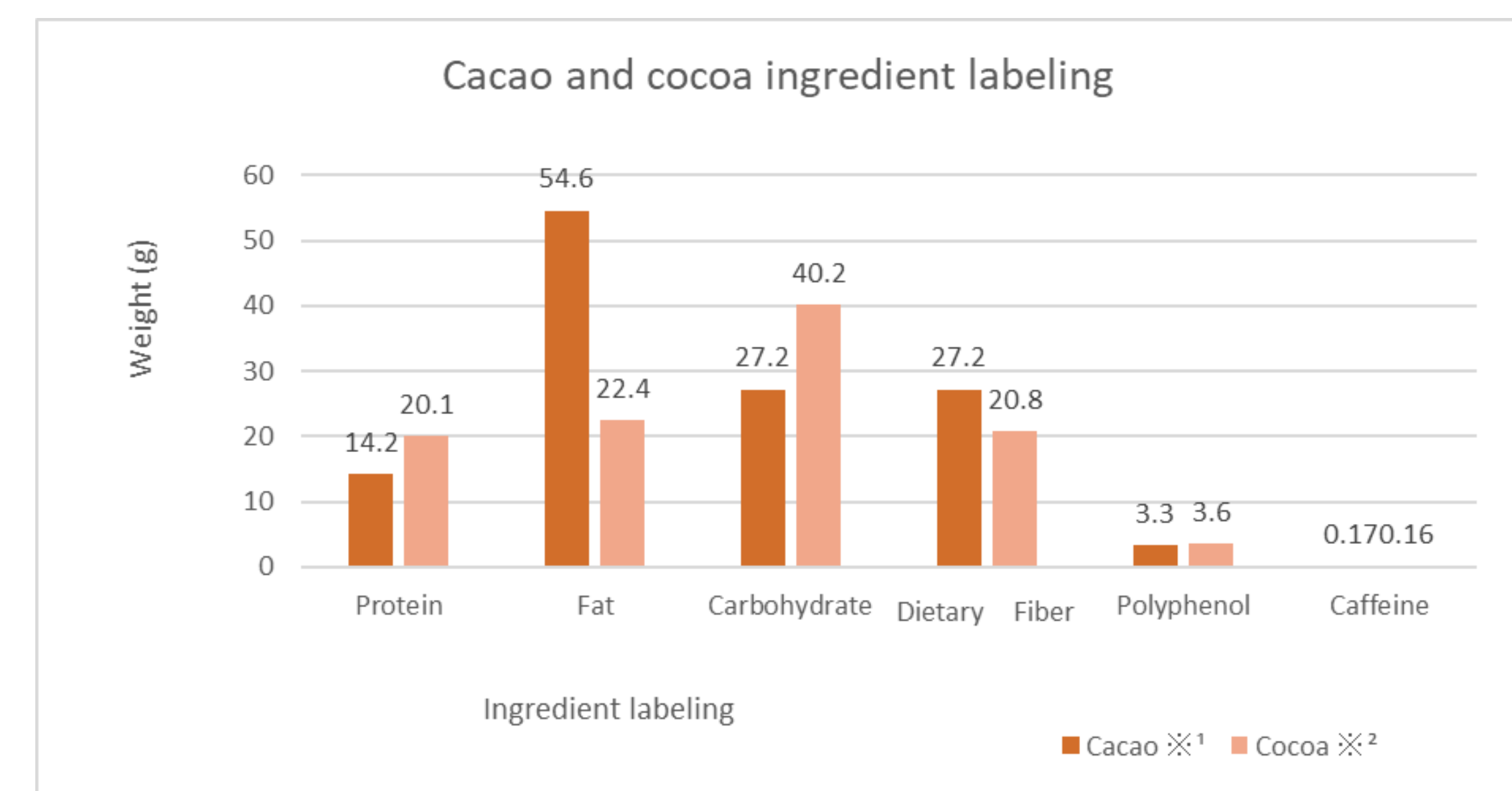
【Ingredients】 Cacao : Milk = 1 : 6 (Sugar)

【Tools】 Cacao grinder, Mixture, Hot pot

【How to make】

- 1, Grind cacao beans
- 2, Add milk
- 3, Stir while warming

	Cacao ※ ¹	Cocoa ※ ²
Calories	657 kcal	360 kcal
Protein	14.2 g	20.1 g
Fat	54.6 g	22.4 g
Carbohydrate	27.2 g	40.2 g
Dietary Fiber	27.2 g	20.8 g
Polyphenol	3300 mg ※ ¹	3600 mg
Caffeine	0.17 g ※ ⁴	0.16 g ※ ⁵



Examples of Cacao Use in Indonesia

- Add Spices → Cacao Source
- Use condensed milk for regular milk
- 【Cacao Syrup】
- No grinding, add Sugar and Spices
- Boil
- Perfect for Indonesia, who prefer sweet drinks



How to make it locally

- **No Electricity and Gas**
- **Anyone can make it in any place.**



【Grinder】 Millstone or Stone plate, Stone stick (Just like grinding coffee beans or pepper)

【Mixture】 Whisk, Pot (Mexican Method)

Conclusion

- First, I want farmers to realize that they **can make such delicious products** from cacao.
- Clarify the physiological functions of cacao drink and **energize farmers.**

Reference

※¹ <https://www.meiji.co.jp/chocohealthlife/efficacy/>, Is there a relationship between chocolate consumption and symptoms of depression? (Quoting from : October 2019, Wiew, depression suicidality and health) ※ Per 100g, ※ Values vary by region and growing year
 ※² <https://tomiz.com/item/00199702>, ※³ <https://www.morinaga.co.jp/sp/products/detail.php?id=PRD2009-08-0159>, ※⁴ <https://www.lifecollection.co.jp/c/gr23/gd58>, ※⁵ <https://www.kataoka.com/enjoy/library/cocoa/about.html>