



*How to eat more
sustainable with
Indonesian recipe –
‘Pepes Ikan’
(Indonesian steamed fish)*



Innovative Education towards
Sustainable Food Systems



Hanum Hapsari

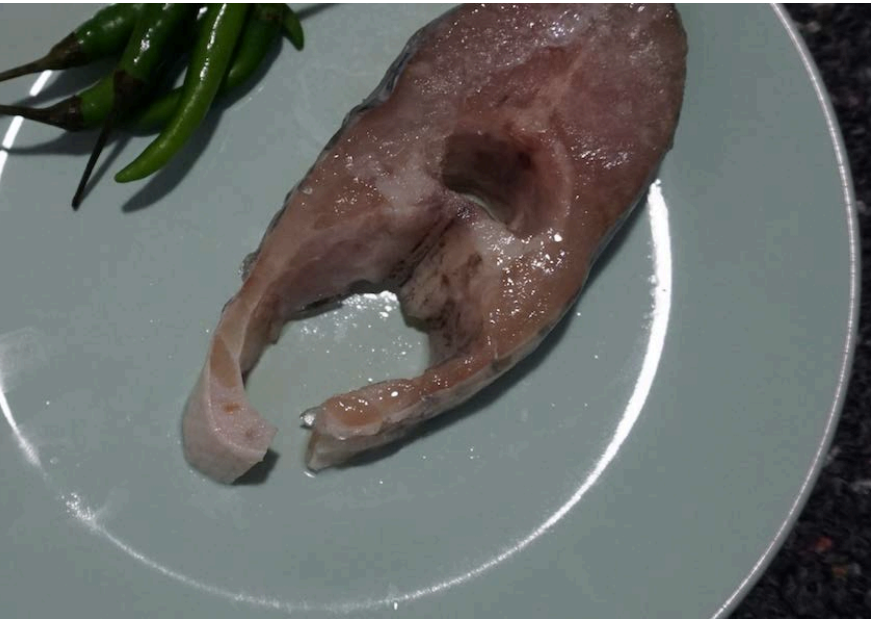
University of Copenhagen

SUSPLUS, Poland 2017

Description of meal

- Steamed fish with typical Indonesian herbs with banana leaf
- Sundanese dictionary: mais and pais
- Different types in each region

Recipe



Ingredients:

- 100 grams of Tilapia Fish
- Fresh lime
- 5 lime leaves
- 1 salam Leaves (Indonesian bay leaves)
- Banana leaves
- 2 stalks lemon grass
- Basil

Spice paste:

- 1 garlic
- 1/4 shallots
- 1 fermented starfruit
- 5 green chilies
- 1/2 of a hand finger of turmeric
- 1/2 teaspoon salt
- 1 of a hand finger of ginger

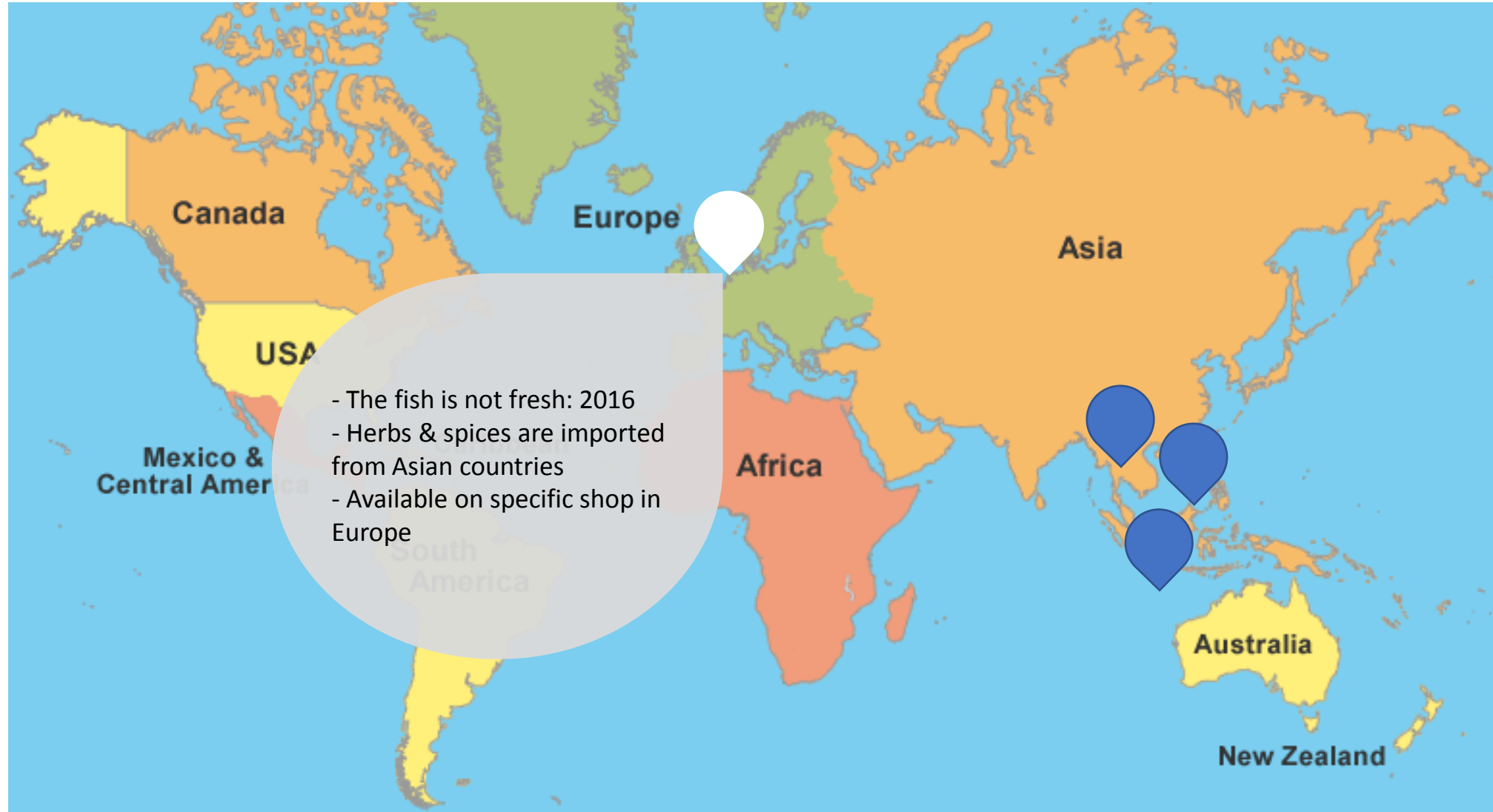
Prep and cook time: 60 minutes

Pre processing steps to cook 'pepes ikan':



Old tradition
Cooking oil is luxury
'Pepes ikan' is shared food
People enjoyed with togetherness

Origin food and ingredients:



Sustainability and health aspects

No use of oil

Steam process

Nutrition among herbs and spices

Economy: different price from the origin

Environment: food miles

Social: local farmer?



Product related qualities

According to FAO guidelines 2016, 'pepes ikan' is maybe one the example of sustainable healthy diets due to:

- Consist of wide variety of foods in one serve
- Minimally processed food
- Using all animal parts of the fish
- Certified fisheries according to EU standard

Long food value chain

Different taste from fresh product

Nutrition Facts	
Serving Size	100 g
Amount Per Serving	
Calories 96	
	% Daily Value
Total Fat 1.7g	3 %
Saturated Fat 0.6g	3 %
Cholesterol 50mg	17 %
Sodium 52mg	2 %
Total Carbohydrate 0g	0 %
Dietary Fiber 0g	0 %
Sugar 0g	
Protein 20g	40 %
Vitamin A 0 % • Vitamin C 0 %	
Calcium 1 % • Iron	3 %
Daily values are based on 2000 calorie diet.	

Amount of waste

- Skin of spices such as garlic and shallots, trunk of basil, banana leaves, and also fish bones.
- Plastic from packaging, banana leaves as the packaging of dishes



Source: <https://www.jumbo.com/jumbo-basilicum-20g/40676PAK/>

- In general, it takes quite some times to produce the final product, 60 minutes
- It uses fish, herbs, spices and fruits (starfruits)
- The dishes are available throughout the year, and every region has their own special recipe
- In terms of sustainability, to make this food outside of Indonesia would be less sustainability in terms of carbon footprint from transportation process
- Using mediterranean dietary pattern especially fish with locally produced ingredients if you eat and cook in Indonesia

Potential improvements towards enhanced sustainability

- The banana leaves can be replaced with aluminum foil. So, the cook does not need to use imported banana leaves that results in high carbon emission from the transportation.
- The use of microwave can be more efficient than the traditional method as the traditional method is usually either used fuels or woods, taking more time and non-ecofriendly.
- The form of ingredients can be changed into powder, it means people can reserve them with longer time as opposed to the conventional form.

Learning outcomes

Food is without border anymore, eat wisely and live happily. When the foods comes to the foreign country, those who want to cook this traditional culinary must consider the carbon footprint generated from the imported ingredients of the culinary. Adapting traditional recipe using local product is better thus, people can prepare foods sustainably.

References

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