KINGDOM OF CAMBODIA

Nation - Religion - King

Cambodia Inter-censal Agriculture Survey 2019 (CIAS 2019) Selection of Thematic Maps

National Institute of Statistics, Ministry of Planning
in collaboration with
Ministry of Agriculture, Forestry and Fisheries

August 2020

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Food and Agriculture Organization of the United Nations

USAID FROM THE AMERICAN PEOPLE

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Foreword

On behalf of the Ministry of Planning and the National Institute of Statistics, I am pleased to present the maps for the Cambodia Inter-Censal Agriculture Survey (CIAS) 2019. These maps are the product of extensive efforts on the part of many talented individuals and of strong cooperation between the Ministries involved, all levels of Government, our Development Partners and the people of Cambodia.

The CIAS 2019 is a major achievement for the Royal Government of Cambodia, enabling a better understanding of the agricultural situation, more informed decision making and serving as a strong foundation for policymaking. The maps presented in this report help to bring the Cambodian agricultural households' story to life. Through these maps we learn more about the holdings' legal status, ownership status, about their crops, livestock or aquaculture focus in each province, about their vulnerability to shocks and about the percentage of female-headed agricultural households in each province. The percentage of small-scale holders per province, as per the Sustainable Development Goals (SDG) definition, is also illustrated in these maps, together with the indicator 2.3.1. about small-scale holders' labour productivity.

More detailed information is available in the tables and graphs accompanying each map and in the CIAS 2019 final report. We make this information freely available in the hope that the investment in the survey and the production of the maps will yield the highest possible returns in terms of the sustainable management of our land and resources, in food security, the profitability and productivity of agriculture and the livelihood of rural people. This work provides us with a sound basis for measuring changes in the agricultural sector and in the livelihood of rural families.

We express our deep sense of gratitude to the Royal Government of Cambodia led by **Samdech Akka Moha Sena Padei Techo HUN SEN**, **Prime Minister of the Kingdom of Cambodia**, for his constant support to the statistical activities which permitted the successful completion of the CIAS 2019. Our thanks are due to the Ministry of Planning (MoP), to the National Institute of Statistics (NIS), to the Department of Planning and Statistics (DPS) of the Ministry of Agriculture, Forestry and Fisheries (MAFF) and to the Food and Agriculture Organization of the United Nations (FAO) in Cambodia which facilitated our activities and led to the success of the CIAS 2019.

I gratefully acknowledge funding and technical assistances provided by the FAO and from the United States Agency for International Development (USAID). Such assistance has been critical to the success of the mapping activity and has helped to ensure that the Royal Government of Cambodia would have the capacity to implement similar activities for future agricultural surveys.

The successful completion of the CIAS 2019 mapping activity was possible with the cooperation provided by all parties involved. The major share of the credit for the success of the CIAS 2019 should go to all those agricultural landholders who gave their valuable time to provide information for the Agricultural Survey.

My special thanks to **H.E. Hor Darith**, Secretary of State in charge of the CIAS 2019, and **H.E Madam Hang Lina,** Delegate of the Government of Cambodia in Charge of Director General of the National Institute of Statistics, **Mr. Mak Mony** Director of planning Statistics Department ministry of who ably led the CIAS 2019 operations.

Finally, thanks are due to everyone who contributed to the production of these of maps and to the wider success of the CIAS 2019.

Ministry of Planning
Phnom Penh
September, 2020

Kitti Settha Pandita CHHAY THAN
Senior Minister
Ministry of Planning

Preface

The National Institute of Statistics (NIS) conducted the first Cambodia Inter-Censal Agriculture Survey (CIAS) 2019 in order to collect data on the structure of the agricultural sector, the nature of the agricultural holdings, the patterns of production and the production systems throughout the country. CIAS 2019 provides valuable information for policy-making and for monitoring development in the agricultural sector. It is hoped that the information provided by the CIAS 2019 will provide a strong foundation for sectoral studies concerning the resource base, production systems and the socio-economic situation of rural households. This will improve the understanding of Cambodian agriculture and help to shape the national strategies to increase the sector productivity, ensuring sustainable rural livelihoods and food security and protecting the natural resource base for the future.

The production of a selection of thematic maps of Cambodian Agriculture is a milestone achievement for the Royal Government of Cambodia, making available more than 30 maps and corresponding charts showing the legal and ownership status of agricultural land holdings, their production patterns, their exposure to shocks and the labor productivity per province, as per SDG definition. The importance of household agriculture in Cambodia is revealed by the large numbers of households engaged in agricultural activity and by the land areas farmed or used for fish raising.

It is therefore my pleasure to present the thematic maps for the CIAS 2019, which are the result of the fruitful cooperation between the NIS of the Ministry of Planning and the Department of Planning and Statistics of the Ministry of Agriculture, Forestry and Fisheries (MAFF). This document will prove useful to planners, policy makers and researchers within Cambodia or oversea and beyond. The Food and Agriculture Organization of the United Nations (FAO) provided technical guidance for the planning and conduct of the CIAS and for the analysis and presentation of results, including this mapping activity.

The impetus for producing these maps came from the wishes of the NIS and MAFF to ensure the production of useful and convenient information resources from the survey. Some of the survey spatial dimensions are simply and clearly presented in these thematic maps, allowing for a better understanding of the resources, production patterns and socio-economic conditions in the household-based agriculture sector. This information is more comprehensively developed in the CIAS 2019 final report and the data can be explored in greater depth and more detail in accompanying publications and web-based resources.

We look forward to comments and suggestions concerning the presentation of information from the CIAS 2019 and continued dialogue with interested readers about ongoing improvements to meet the needs of policy makers and program implementing agencies.

I hope you find these thematic maps of the CIAS 2019 to be the valuable resource that they were planned to be.

On behalf of the Royal Government of Cambodia I would like to express sincere thanks to the FAO and to the United States Agency for International Development (USAID) for the technical and financial assistance provided for the CIAS 2019. Including this mapping exercise.

My deep appreciation goes to all the NIS and Ministry of Agriculture, Forestry and Fisheries staff involved in various stages of the CIAS 2019 for their hard work, expertise and team work in producing this valuable resource.

Finally, I am grateful to **Kitti Settha Pandita CHHAY THAN**, **Senior Minister, Ministry of Planning** and **H.E Hor Darith, Secretary of state**, MoP, for their great support to the CIAS 2019.

<div align="center">

HANG LINA

Delegate of the Government of Cambodia
In Charge of Director General of
National Institute of Statistics

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Brief presentation of the CIAS 2019 methodology[1]

The Cambodia Inter-censal Agriculture Survey (CIAS) of the Kingdom of Cambodia, conducted in 2019 was a comprehensive statistical undertaking for the collection and compilation of information on crop cultivation, raising livestock and poultry, and aquaculture and capture fishing operations. The data collected and generated from this inter-censal survey will be useful in the formulation of plans, policies and programs for the development and improvement of the agriculture and fisheries sectors in the Royal Government of Cambodia (RGC). This was the first inter-censal agriculture survey conducted in the Kingdom of Cambodia, after the first Census of Agriculture was conducted in 2013.

The National Institute of Statistics (NIS) of the Ministry of Planning (MOP), and the Ministry of Agriculture, Forestry and Fisheries (MAFF), were the responsible government ministries authorized to undertake the CIAS 2019. While NIS had the census mandate, the MAFF will be the primary user of the data produced from the inter-censal survey.

1. Objective

The main objective of the CIAS 2019 was to provide data on the temporal agricultural situation in the Kingdom of Cambodia to be utilized by planners and policy-makers. Specifically, the inter-censal survey data will be useful in:

1. Providing an updated sampling frame in the conduct of agricultural surveys;
2. Providing data at the country and regional level, with some items available at the province level;
3. Providing data on the current structure of the country's agricultural holdings, including cropping, raising livestock and poultry, and aquaculture and capture fishing activities.

2. Survey scope

The CIAS utilized just two questionnaires for the data collection effort: the first questionnaire was a screening form that was used to collect basic agricultural information for every household within the sampled Enumeration Areas (EAs), and the second and main questionnaire for the survey collected data on several aspects of the agricultural holding, including demographic information about the holder, any co-holders and all household members, crop production activity, raising livestock, raising poultry, insect activity, aquaculture activity, capture fishing activity, economy during the last 12 months, labour used by the holding, and information on the household dwelling and assets.

3. Survey timing and reference period

The CIAS 2019 was undertaken in three phases: A household listing phase – to list all households in the selected sample of 1,350 EAs – was undertaken from 24 to 30 June 2019. The second phase of complete agricultural household interviews was conducted during the period 8-23 July 2019. The third and final phase of the data collection effort focused on the juridical holdings and took place from 24 October through 8 November 2019. The 12-month period prior to 1 July 2019 (i.e. from 1 July 2018 to 30 June 2019) was used as the reference period for the data collection effort.

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[1] A more comprehensive description of the CIAS 2019 methodology can be found in the CIAS 2019 final report.

4. Sampling Frame and sampling procedure

The 2013 Agriculture Census Sampling Frame which was used to select the sample listed around 14,000 villages and 35,000 Enumeration Areas (EAs). Since the number of rural households per EA was not known, in order to calculate the number of rural households in each province the sum of the households in the villages that were classified as rural was computed. The listing operation in each sampled EA was conducted with the aim of identifying the target population, i.e. the households engaged in agricultural activities.

The adopted sampling procedure was a two-stage stratified sampling, with EAs as primary units and households engaged in agriculture as secondary units. It was decided to select 1,350 EAs and 12 agricultural households for each EA, for a total planned sample size of 16,000 households. The 1,350 EAs were allocated to the provinces proportionally to the number of rural households. Since there are not rural villages in Phnom Penh, 30 EAs (that correspond to 60,000 rural households) have been allocated to Phnom Penh Province by default and 1,320 EAs are allocated to the other provinces.

All households in the country, excepting those located in core urban districts of Phnom Penh, Preah Sihanouk and Siem Reap provinces, had the potential to be selected in the sample of the CIAS 2019. A total of 101,383 households were contacted during the screening process and agricultural activity was determined. A sample of 15,994 households with agricultural activity was selected for the survey.

In addition to the household data collection effort, a separate data collection effort with a focus on large agricultural enterprises operated by corporations, cooperatives, government and private institutions – termed 'juridical holdings' – in the non-household sector was also conducted. Data was collected from 186 juridical holdings.

5. Survey procedure and field operations

All data in the CIAS were collected via Computer Assisted Personal Interviews by a group of trained enumerators and supervisors directly interviewing knowledgeable respondents on agricultural holdings. The innovative use of CAPI for data collection allowed for timely monitoring of the data flow and data quality. The respondents were any adult knowledgeable of the agricultural holding's activities. The most qualified respondent was the agriculture holder. However, in his or her absence, the spouse or knowledgeable household member could also act as the respondent. It was instructed that no neighbor or other household was interviewed or asked for the information on the holding being surveyed.

All data from the CIAS were collected by trained enumerators who were selected from among existing National and Provincial staff of NIS and MAFF. Field operations included training of all supervisors and enumerators, data collection and supervision. Central and field staff from the NIS and MAFF were trained before they undertook the data collection and supervision process.

Data Supervisors, all staff members from the NIS, were responsible for conducting data quality control checks. Field Supervisors from MAFF and NIS were responsible for assisting with enumerator issues in the field, encouraging good relationships with village contacts and promoting cooperation from agricultural household respondents. A total of 419 staff were involved in the data collection effort.

6. Data processing

Once the enumerators collected the survey data for an agricultural household, they submitted the completed questionnaires via Survey Solutions to their Data Supervisors who, in turn, carried out scrutiny checks. If there were errors or suspicious data detected, Data Supervisors would return the record to

the enumerator to address the issues with the respondent if needed, and the corrected record would be re-submitted to the Data Supervisor. Once the records were validated by Data Supervisors, they would approve them for final review from headquarters staff.

At the survey headquarters, the completed questionnaires were received after being approved by Data Supervisors. If any issues or suspicious data were discovered during the headquarters review, the records could be returned to the enumerator for verification or correction if needed.

The data review and calculation of the survey estimates was undertaken using the RStudio software tool. Validation of the data began even when the questionnaires were being designed in the CAPI tool, as Survey Solutions allows for consistency checks to be built-in to the data collection tool. As soon as completed records were returned during the data collection stage additional consistency checks were completed, in comparing reports to previous census data, evaluating ranges of reasonableness for certain items, and verifying any outlier records with the enumerator and/or respondent.

7. Summary indicators

Some of the key estimates obtained from the CIAS 2019 are presented below for the country as a whole.

Summary Indicators: Household agricultural holdings	
Number of household agricultural holdings	1,726,337
Percentage of household agricultural holdings producing agricultural products for:	
Mainly for home consumption	61.1%
Mainly for sale	38.9%
Crop Production activity	
Number of household holdings growing crops	1,516,967
Percent of household holdings growing crops	87.9%
Livestock, Poultry and/or Insect activity	
Number of agricultural households keeping or raising livestock, poultry and/or insects at any time during the reference year	1,300,725
Percentage of agricultural households keeping or raising livestock, poultry or insects at any time during the reference year	75.3%
Aquaculture and Capture Fishing activity	
Number of households engaged in aquaculture and/or capture fishing	268,277
Percentage of households engaged in aquaculture and/or capture fishing	15.5%
Among those households engaged in aquaculture and/or capture fishing	
Percentage of households engaged only in aquaculture from the total number of households engaged in aquaculture and/or capture fishing	12.6%
Percentage of households engaged only in capture fishing from the total number of households engaged in aquaculture and/or capture fishing	80.8%
Percentage of households engaged in both aquaculture and capture fishing from the total number of households engaged in aquaculture and/or capture fishing	6.6%

Mapping exercise methodology

1. Mapping exercise objective

The mapping activity was conducted from July to September 2020, following the completion of the CIAS 2019 data analysis and report writing. Its main objective was to produce a set of thematic maps using the CIAS 2019 results disaggregated by province, and as deemed most useful by the government partners.

Mapping the agriculture-related indicators at the provincial level is expected to inform the government and development partners about the corresponding trends and dynamics within the country, and to help orientate new development policies and programs. A secondary objective was to illustrate and map Cambodia' socio-economic dynamics within the agricultural sector when relevant and as per the available data.

In producing any maps, a number of choices must be made: choices of scales, levels and periods, topics and data (quantitative or qualitative), analysis, data processing and representation methods. This document will describe these different choices and the reasons why these decisions were taken.

2. Needs assessment

The National GIS Expert collaborated with MAFF and FAO experts to decide on the most suitable methodology to select the most useful and relevant maps, and then to design them. He conducted a needs assessment, under the form of meetings with representatives of MAFF and NIS, to finalize a list of thematic maps.

3. Methodology for map design

A thematic map is also called a special-purpose, single-topic, or statistical map. A thematic map focuses on the spatial variability of a specific distribution or theme (such as Crop, Livestock or ratio of Sale and Consumption), whereas a reference map focuses on the location and names of features. Thematic maps normally include some locational or reference information, such as map title, place names or major water bodies, scale, north arrow and legend, to help map readers familiarize themselves with the geographic area covered on the map. All thematic maps are composed of two important elements: a base map and statistical data. These two elements are usually available as digital files, such as a cartographic boundary file and census or survey data.

Thematic maps display data about a topic or theme of interest occurring within the boundaries of selected geographic areas, such as the provinces here. The data is typically grouped into a number of value categories and symbolized with distinct colors to represent each category. Thematic maps are an effective visual aid for presenting community data in an intuitive way, particularly for persons who are not subject matter experts.

Maps can quickly show the geographic concentration of housing and economic agriculture, crops, forestry, fisheries, community resources, etc. important to the Consolidated Plan process. Once created, maps are easily re-usable in a variety of formats. Maps can be employed in slideshow and printed presentations, within publications, and on a website. Maps can also be used as a presentation aid in public meetings. Presenting maps in a public meeting allows residents to visualize existing data, proposed target areas and other community needs.

Geographic information systems (GIS) or computer-mapping packages are typically used to generate thematic maps. The maps proposed in this report were produced using the free and open source software QGIS version 3.12.

- _Projection and coordinate system_: All thematic maps were produced at national level only, since the CIAS 2019 data analysis was presented by province and socio-geographic zone (no further disaggregation at sub-national level was possible) with the project Coordinate Reference System (CRS) Indian 1960 / UTM zone 48N;
- _Base maps data sources_: All thematic maps were designed using the same base maps, showing international borders with neighboring countries (islands included), provincial boundaries and water bodies. These base maps were produced by official agencies, Ministry of Land Management, Urban Planning and Construction, Ministry of Interior and the National Institute of Statistics (NIS)[2];
- _Thematic layers data sources_: The thematic layers displayed above the base maps used the tables developed during the CIAS 2019 data survey analysis without any modifications.

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[2] Official English spelling from the sample frame of the Population Census in Cambodia or from the Ministry of Interior.

1. Legal Status

Map 1.1: Holdings reporting sole proprietor legal status (without registration) in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
"Sole proprietor (without : 80.6%
registration)"

This map shows that most household agricultural holdings in Cambodia report their legal status as sole proprietor, without registration. All sampled holdings in Stung Treng province reported this legal status, while it concerns less than 20% of the sampled holdings in Pailin province

Legend

Water

Holdings reporting sole proprietor legal status (without registration) (%)

- ≤ 30.0
- 31.0 - 50.0
- 50.1 - 70.0
- 70.1 - 90.0
- > 90.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Table 1.1: Holdings reporting sole proprietor legal status (without registration)

Province code	Province name	Holdings reporting sole proprietor legal status (without registration)	Holdings reporting sole proprietor legal status (without registration) (%)
01	Banteay Meanchey	77,808	98.7
02	Battambang	89,139	85.9
03	Kampong Cham	79,794	68.1
04	Kampong Chhnang	73,377	90.9
05	Kampong Speu	115,326	84.2
06	Kampong Thom	66,155	55.5
07	Kampot	65,823	62.9
08	Kandal	97,886	91.9
09	Koh Kong	9,722	68.0
10	Kratie	33,779	79.3
11	Mondul Kiri	7,788	83.6
12	Phnom Penh	19,112	90.7
13	Preah Vihear	24,275	76.7
14	Prey Veng	138,142	99.7
15	Pursat	53,248	89.8
16	Ratanak Kiri	17,659	62.5
17	Siem Reap	80,223	63.6
18	Preah Sihanouk	10,897	98.8
19	Stung Treng	15,029	100.0
20	Svay Rieng	81,838	91.9
21	Takeo	140,238	98.8
22	Otdar Meanchey	16,434	45.5
23	Kep	2,766	55.4
24	Pailin	1,340	19.6
25	Tboung Khmum	74,060	72.4

Holdings reporting sole proprietor legal status (without registration)

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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Map 1.2: Holdings reporting sole proprietor legal status (with registration) in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
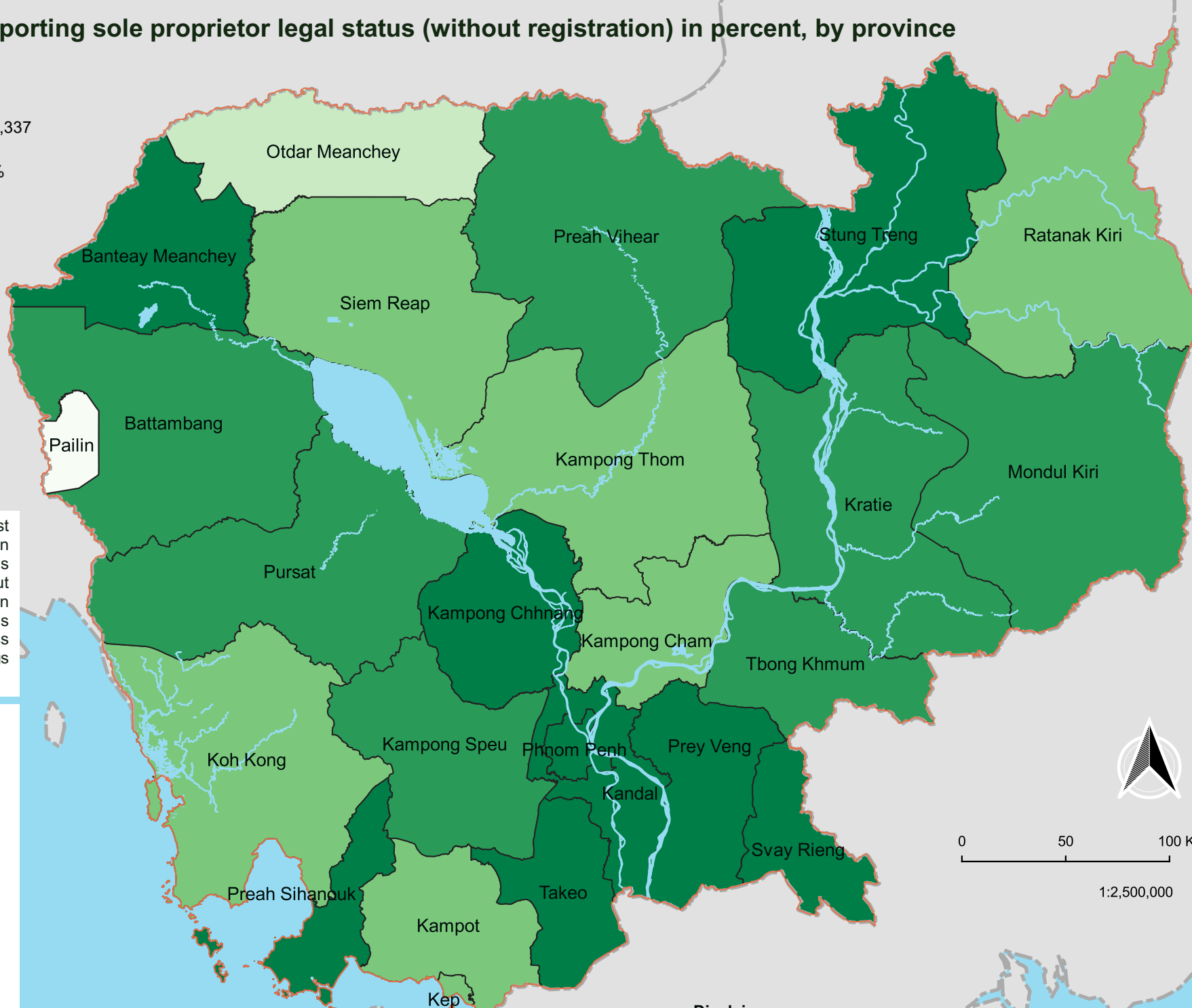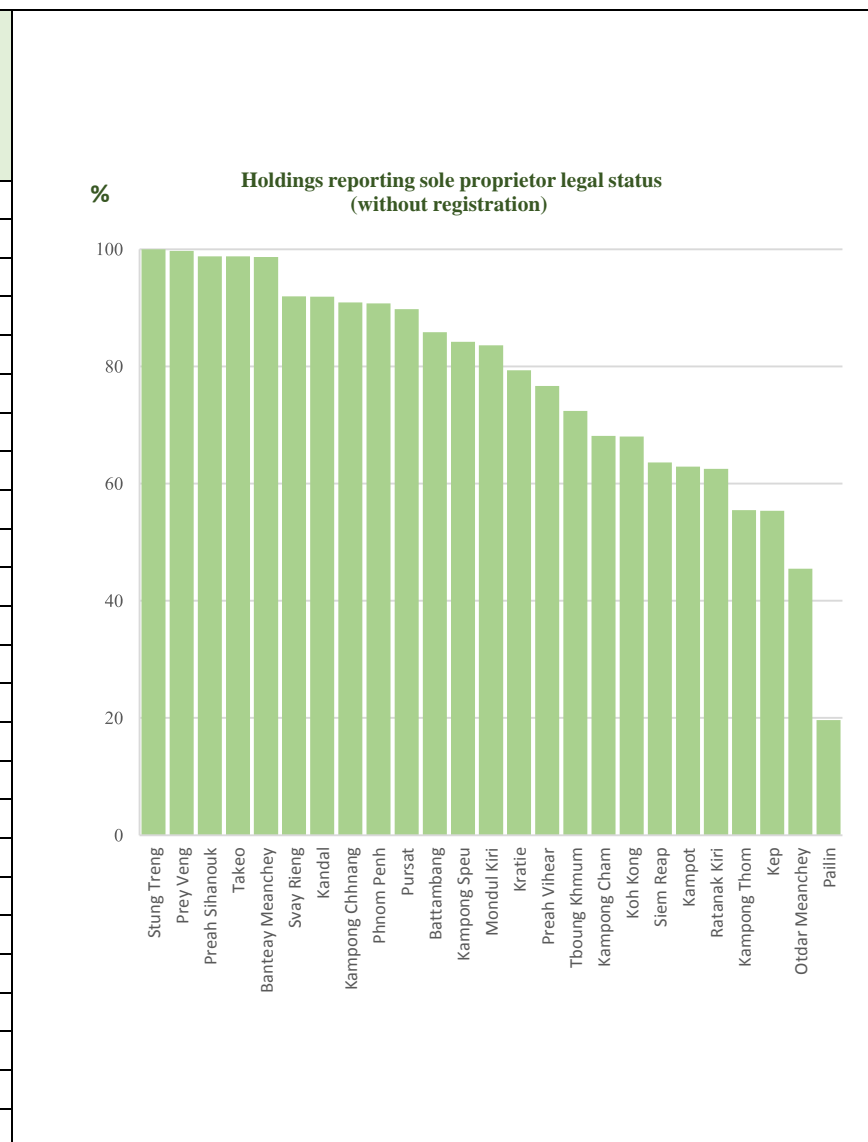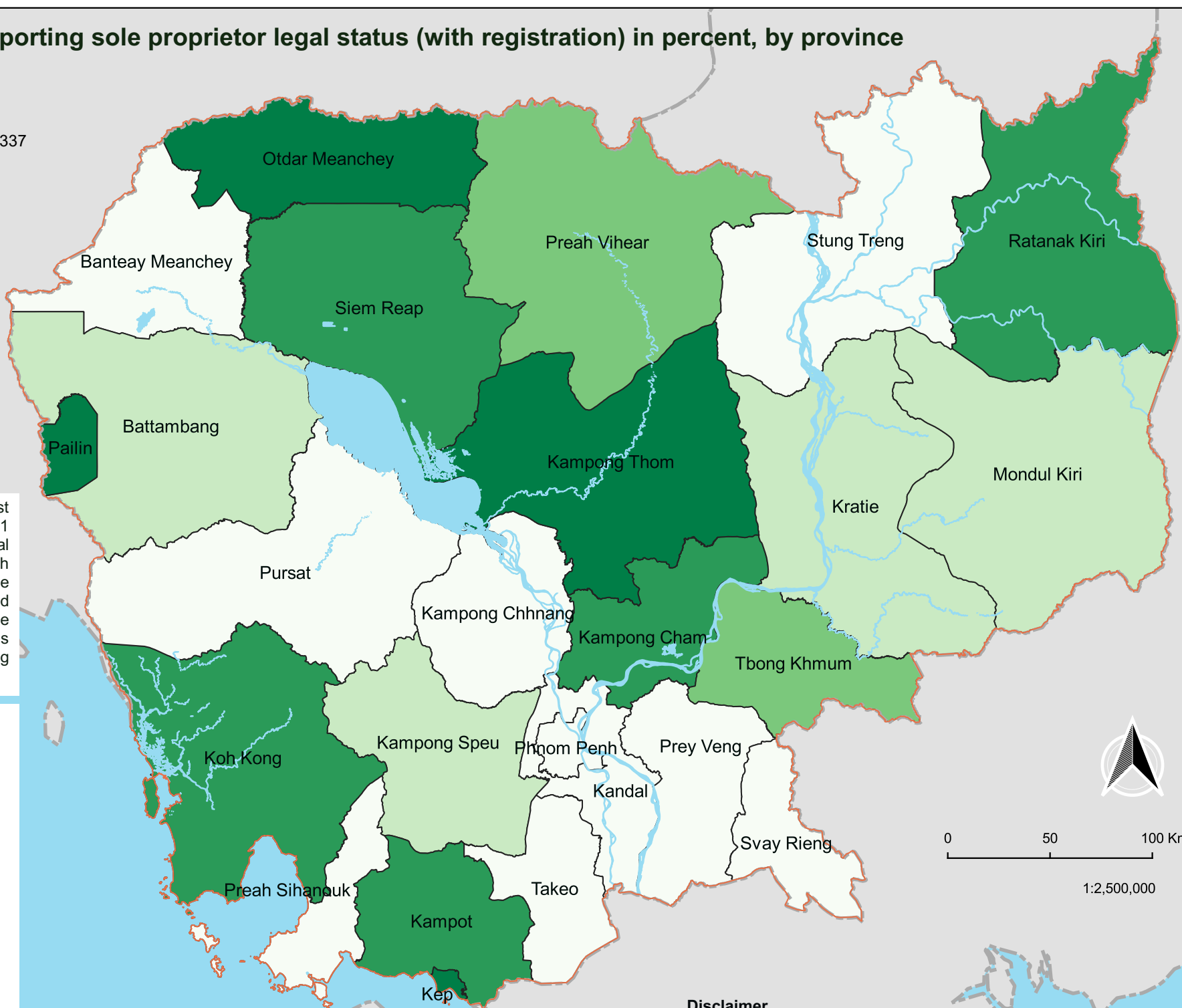"Sole proprietor (with : 19.0%
registration)"

This map shows that in most provinces of Cambodia, less than 1 in 5 holdings reported a legal status of sole proprietor with registration. More than 80% of the sampled holdings in Pailin reported this status, while none of the sampled holdings reported this legal status in Stung Treng province

Legend

Water

Holdings reporting sole proprietor legal status (with registration) (%)

≤ 10.0

10.1 - 20.0

20.1 - 30.0

30.1 - 40.0

> 40.0

Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Kampot

Takeo

Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Disclaimer
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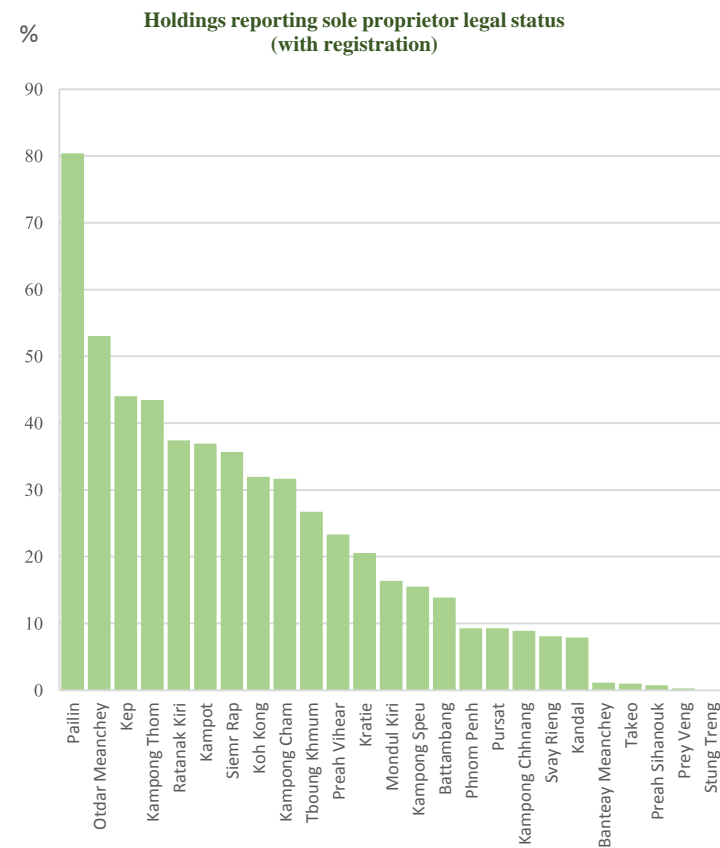
10

Table 1.2: Holdings reporting sole proprietor legal status (with registration)

Province code	Province name	Holdings reporting sole proprietor legal status (with registration)	Holdings reporting sole proprietor legal status (with registration) (%)
01	Banteay Meanchey	887	1.1
02	Battambang	14,423	13.9
03	Kampong Cham	37,100	31.7
04	Kampong Chhnang	7,176	8.9
05	Kampong Speu	21,238	15.5
06	Kampong Thom	51,780	43.4
07	Kampot	38,647	36.9
08	Kandal	8,381	7.9
09	Koh Kong	4,565	32.0
10	Kratie	8,756	20.6
11	Mondul Kiri	1,527	16.4
12	Phnom Penh	1,953	9.3
13	Preah Vihear	7,391	23.3
14	Prey Veng	405	0.3
15	Pursat	5,495	9.3
16	Ratanak Kiri	10,572	37.4
17	Siem Reap	45,008	35.7
18	Preah Sihanouk	81	0.7
19	Stung Treng	0	0.0
20	Svay Rieng	7,190	8.1
21	Takeo	1,412	1.0
22	Otdar Meanchey	19,159	53.0
23	Kep	2,200	44.0
24	Pailin	5,491	80.4
25	Tboung Khmum	27,340	26.7

Holdings reporting sole proprietor legal status (with registration)

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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2. Ownership Status

Map 2.1: Holdings owning agricultural land used in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings owning their agricultural land used : 98.1%

Almost all household agricultural holdings in Cambodia own their agricultural land used. The lowest percentage of holdings owning their land is found in Pailin province, while the highest percentage is found in Kampot. There seems to be a trend in Cambodia with the western-most provinces less likely to own their land, while the eastern-most provinces have the highest ownership rates.

Legend
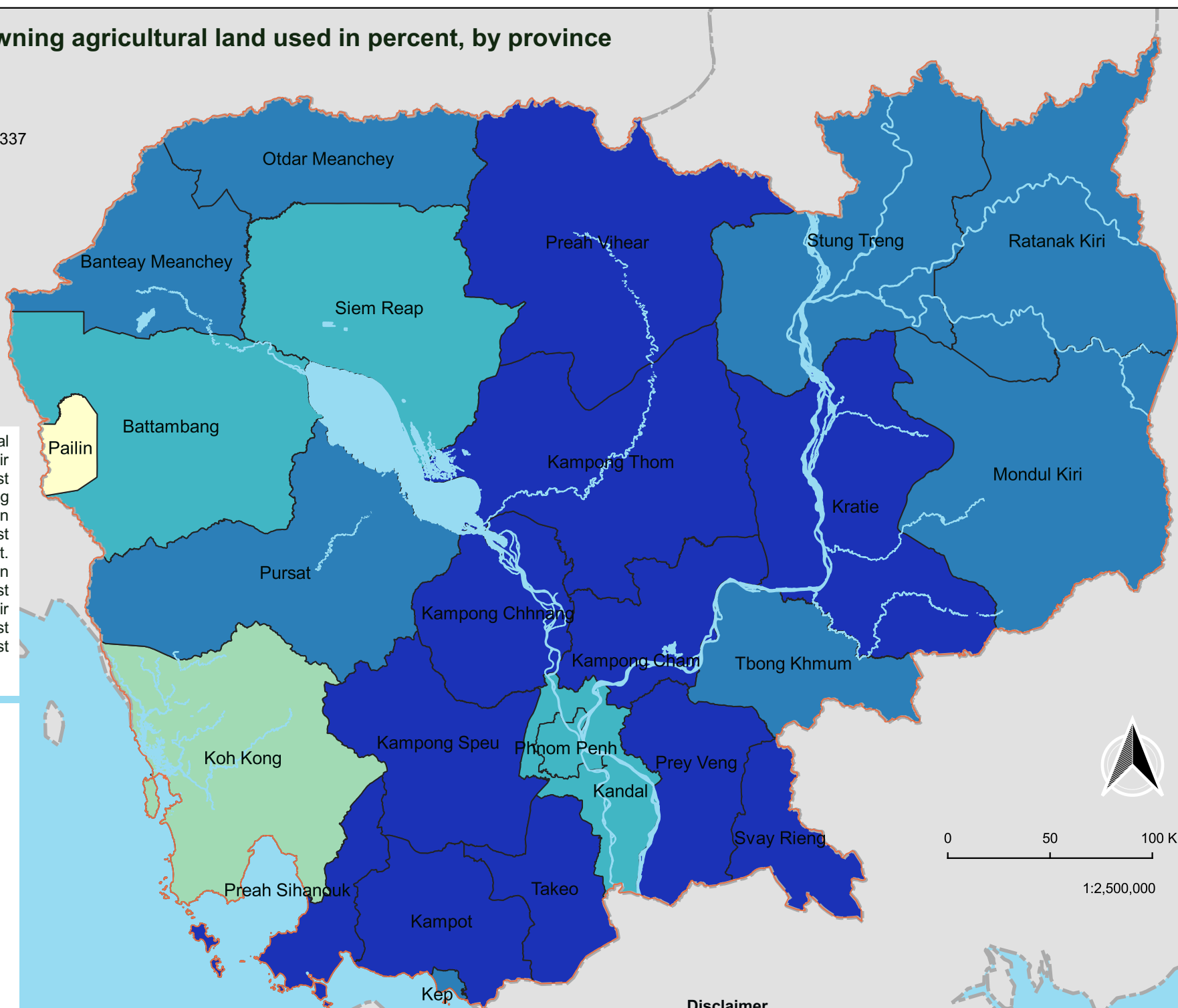
| | Water |

Holding owning agricultural land used (%)

	≤ 90.0
	90.1 - 93.0
	93.1 - 96.0
	96.1 - 99.0
	> 99.0

Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo
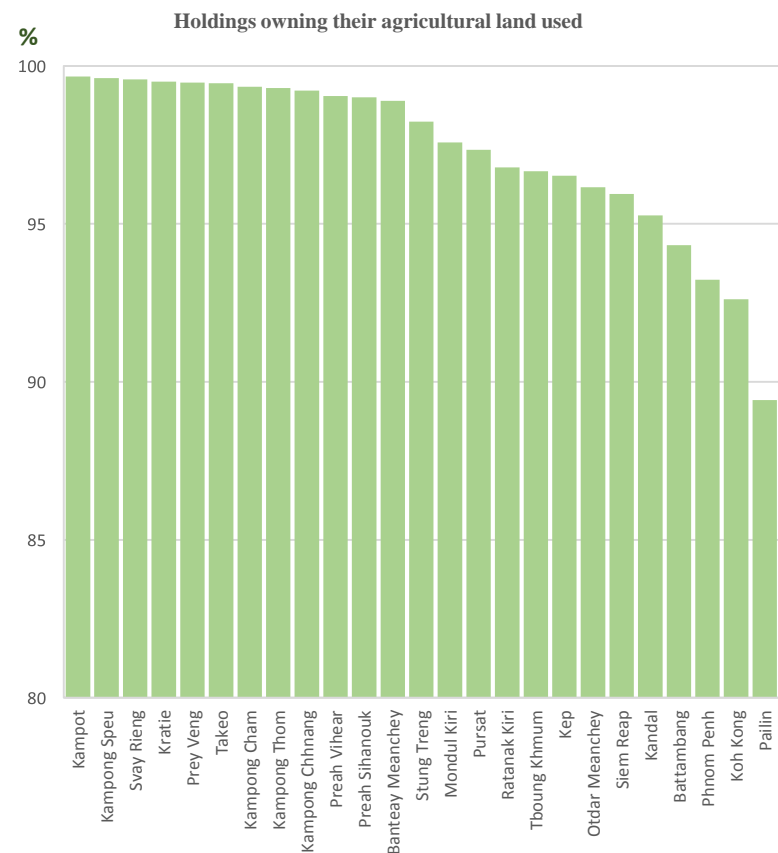
Kampot

Kep

0   50   100 Km

1:2,500,000

Disclaimer

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Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Table 2.1: Holdings owning their agricultural land used

Province code	Province name	Holdings reporting owning their agricultural land used	Holdings reporting owning their agricultural land used (%)
01	Banteay Meanchey	77,971	98.9
02	Battambang	97,939	94.3
03	Kampong Cham	116,348	99.3
04	Kampong Chhnang	80,063	99.2
05	Kampong Speu	136,425	99.6
06	Kampong Thom	118,400	99.3
07	Kampot	104,269	99.7
08	Kandal	101,504	95.3
09	Koh Kong	13,232	92.6
10	Kratie	42,371	99.5
11	Mondul Kiri	9,090	97.6
12	Phnom Penh	19,639	93.2
13	Preah Vihear	31,364	99.0
14	Prey Veng	137,814	99.5
15	Pursat	57,733	97.3
16	Ratanak Kiri	27,350	96.8
17	Siem Reap	12,099	96.0
18	Preah Sihanouk	10,920	99.0
19	Stung Treng	14,764	98.2
20	Svay Rieng	88,645	99.6
21	Takeo	141,230	99.5
22	Otdar Meanchey	34,735	96.2
23	Kep	4,823	96.5
24	Pailin	6,108	89.4
25	Tboung Khmum	98,677	96.7

Holdings owning their agricultural land used

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 2.2: Holdings renting agricultural land in percent, by province

**CAMBODIA:**

Total number of holdings : 1,726,337

Percentage of holdings renting agricultural land : 4.1%

Less than 5% of all household agricultural holdings in Cambodia rent the land they use from others. Holdings in the western-most provinces are more likely to rent, with rates reaching more than 10% in Otdar Meanchey and Battambang.

Legend

	Water

Holdings renting agricultural land (%)

	≤ 1.0
	1.1 - 3.0
	3.1 - 5.0
	5.1 - 8.0
	> 8.0

Otdar Meanchey
Banteay Meanchey
Siem Reap
Preah Vihear
Stung Treng
Ratanak Kiri
Pailin
Battambang
Pursat
Kampong Thom
Kratie
Mondul Kiri
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Svay Rieng
Preah Sihanouk
Takeo
Kampot
Kep

0   50   100 Km

1:2,500,000

Disclaimer
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Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF
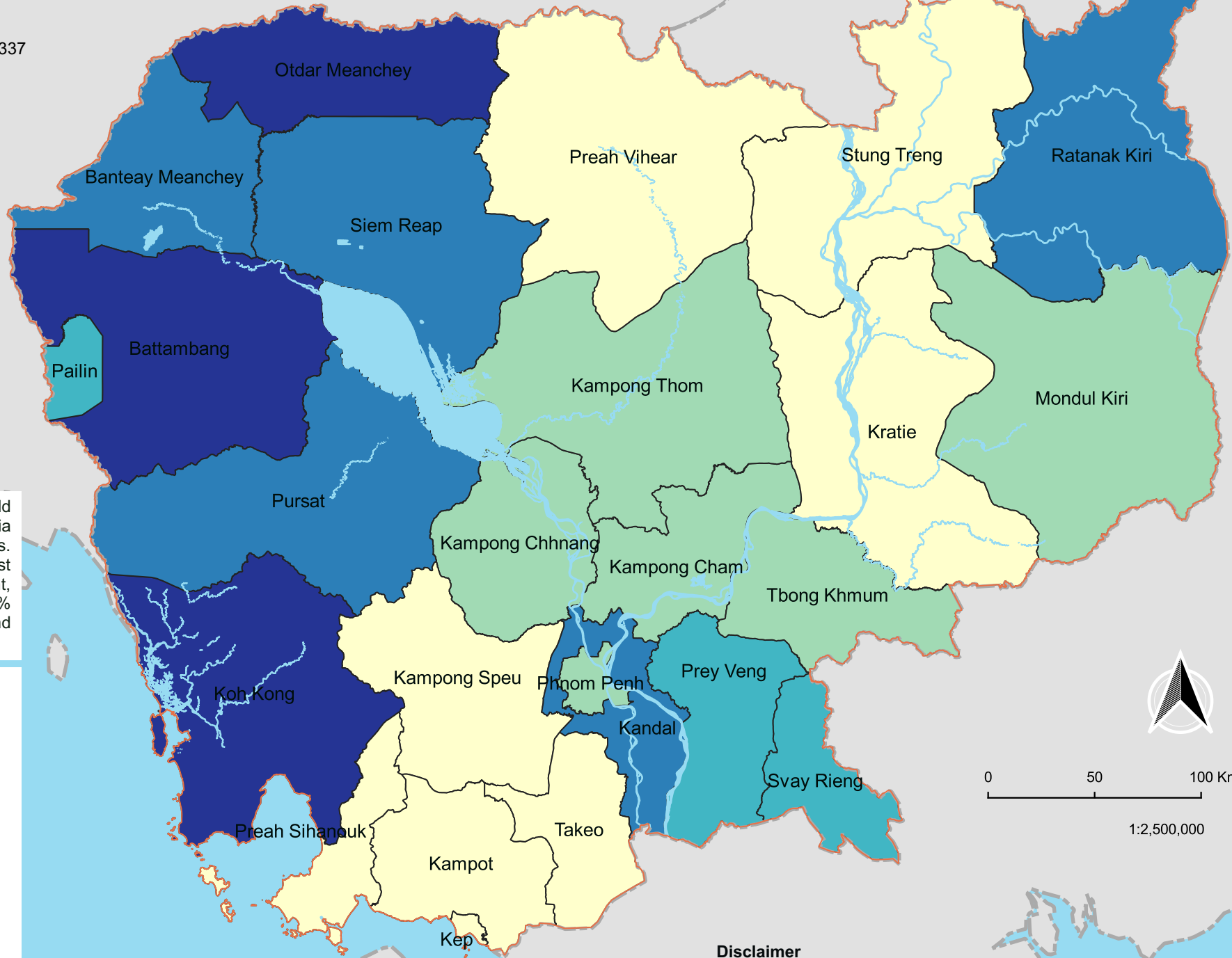
Table 2.2: Holdings renting agricultural land

Province code	Province name	Holdings reporting renting agricultural land	Holdings reporting renting agricultural land (%)
01	Banteay Meanchey	4,333	5.5
02	Battambang	16,237	15.6
03	Kampong Cham	2,077	1.8
04	Kampong Chhnang	1,072	1.3
05	Kampong Speu	1,169	0.9
06	Kampong Thom	1,545	1.3
07	Kampot	608	0.6
08	Kandal	6,703	6.3
09	Koh Kong	1,164	8.1
10	Kratie	264	0.6
11	Mondul Kiri	189	2.0
12	Phnom Penh	652	3.1
13	Preah Vihear	194	0.6
14	Prey Veng	6,737	4.9
15	Pursat	3,479	5.9
16	Ratanak Kiri	1,764	6.2
17	Siem Reap	9,472	7.5
18	Preah Sihanouk	16	0.1
19	Stung Treng	98	0.7
20	Svay Rieng	3,464	3.9
21	Takeo	1,514	1.1
22	Otdar Meanchey	3,907	10.8
23	Kep	0	0.0
24	Pailin	339	5.0
25	Tboung Khmum	3,027	3.0
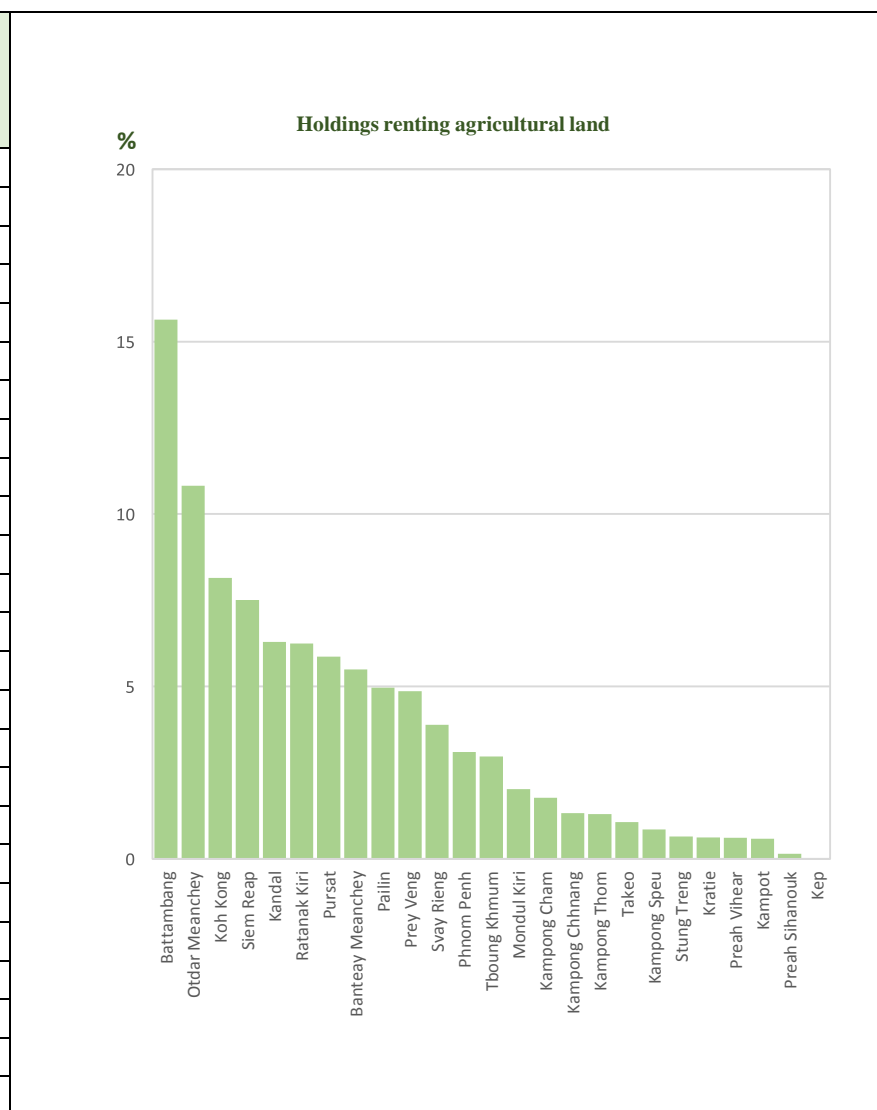
Holdings renting agricultural land

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

3. Crop Production (both parcel & homelot)

Map 3.1: Holdings reporting aromatic paddy rice production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
reporting aromatic : 13.1%
paddy rice production

Only 13.1% of all Cambodian household agricultural holdings are engaged in aromatic paddy production. Holdings in north-west provinces have the highest percentages of holdings growing aromatic paddy, with 31.2% in Banteay Meanchey. On the contrary, aromatic paddy was not reported as grown by any of the sampled holdings in Pailin and Preah Sihanouk provinces.

Legend

Water

Holdings reporting aromatic paddy rice production (%)

≤ 5.0

5.1 - 10.0

10.1 - 15.0

15.1 - 25.0

> 25.0

Otdar Meanchey
Banteay Meanchey
Siem Reap
Preah Vihear
Stung Treng
Ratanak Kiri
Battambang
Pailin
Kampong Thom
Kratie
Mondul Kiri
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Svay Rieng
Preah Sihanouk
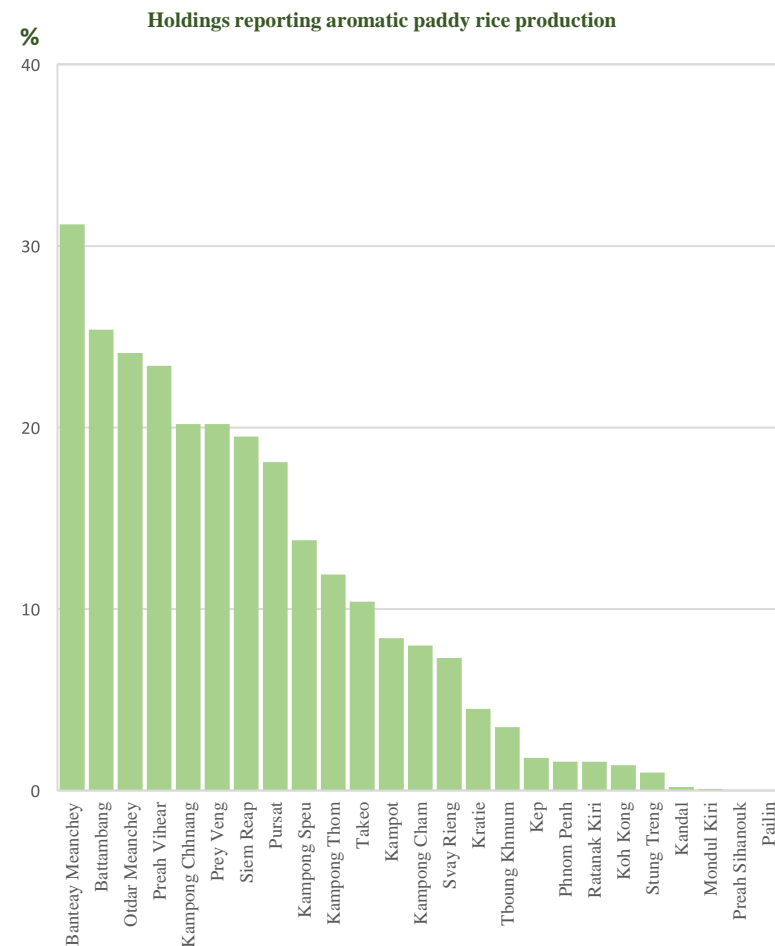Takeo
Kampot
Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF
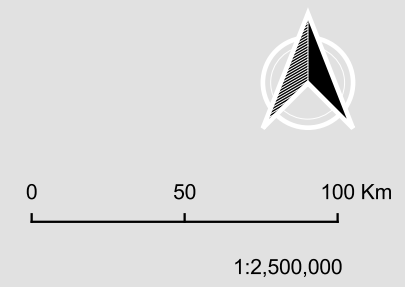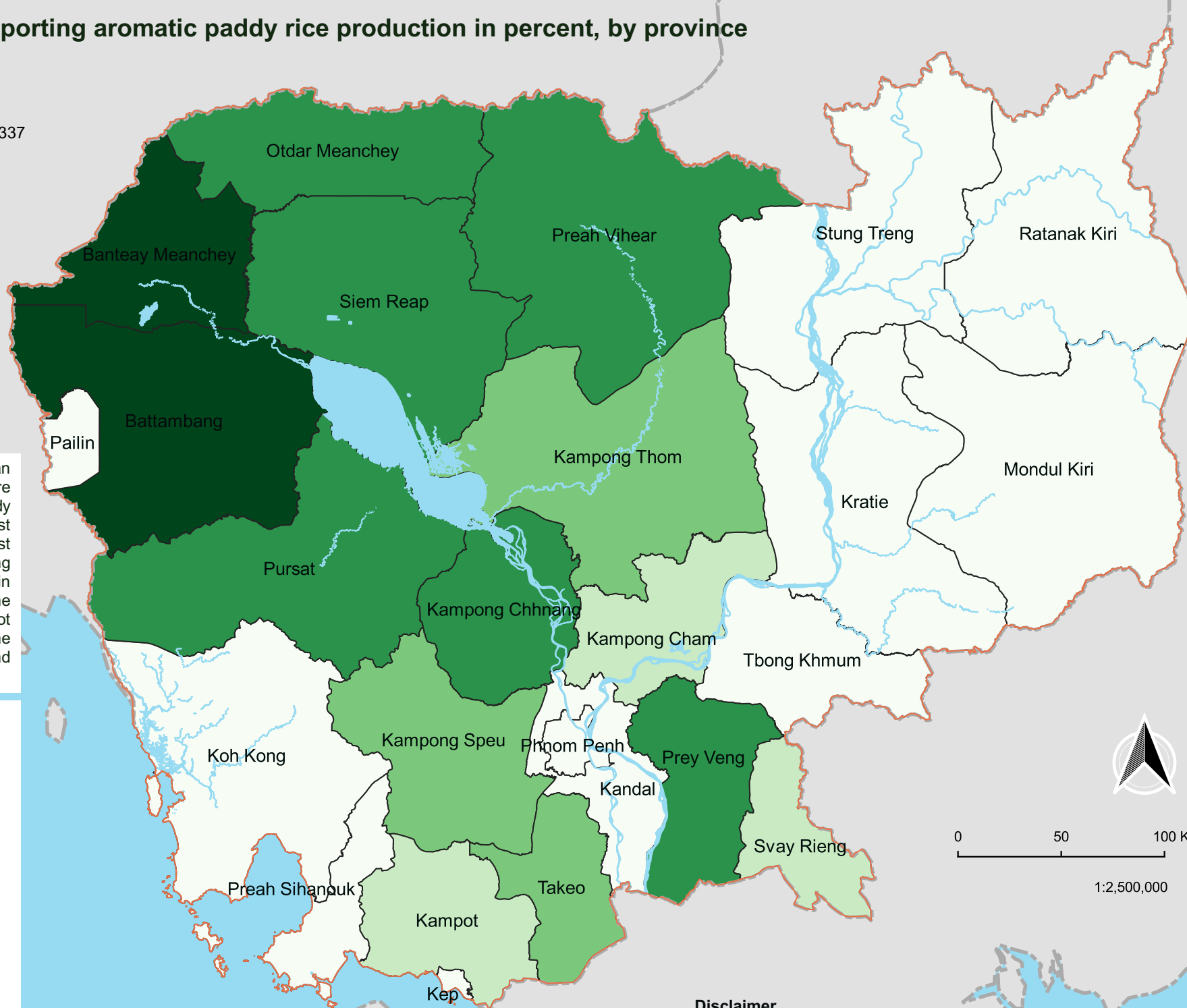
Disclaimer
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Table 3.1: Holdings reporting aromatic paddy rice production

Province code	Province name	Holdings reporting aromatic paddy rice production	Holdings reporting aromatic paddy rice production (%)
01	Banteay Meanchey	24,577	31.2
02	Battambang	26,409	25.4
03	Kampong Cham	9,317	8.0
04	Kampong Chhnang	16,293	20.2
05	Kampong Speu	18,952	13.8
06	Kampong Thom	14,161	11.9
07	Kampot	8,766	8.4
08	Kandal	162	0.2
09	Koh Kong	204	1.4
10	Kratie	1,920	4.5
11	Mondul Kiri	12	0.1
12	Phnom Penh	339	1.6
13	Preah Vihear	7,397	23.4
14	Prey Veng	27,944	20.2
15	Pursat	10,724	18.1
16	Ratanak Kiri	454	1.6
17	Siem Reap	24,585	19.5
18	Preah Sihanouk	0	0.0
19	Stung Treng	153	1.0
20	Svay Rieng	6,532	7.3
21	Takeo	14,815	10.4
22	Otdar Meanchey	8,690	24.1
23	Kep	91	1.8
24	Pailin	0	0.0
25	Tboung Khmum	3,579	3.5

Holdings reporting aromatic paddy rice production

Map 3.2: Ratio of area harvested to area planted for aromatic paddy rice, by province

CAMBODIA:

Number of holdings with aromatic paddy production : 226,077

Area harvested / area planted (x100) : 94.8

Almost all of the area planted to aromatic paddy rice was harvested during the reference period. The sampled holdings from six provinces (Kandal, Mondul Kiri, Phnom Penh, Ratanak Kiri, Stung Treng and Kep) harvested 100% of their planted areas. Kratie had the lowest ratio, with only 73.8% of its planted aromatic paddy rice area harvested.

Legend

Water

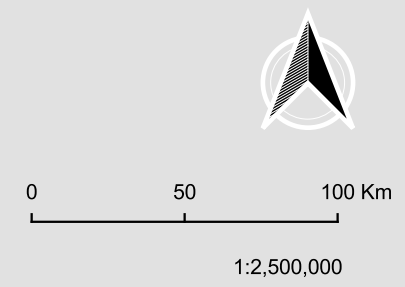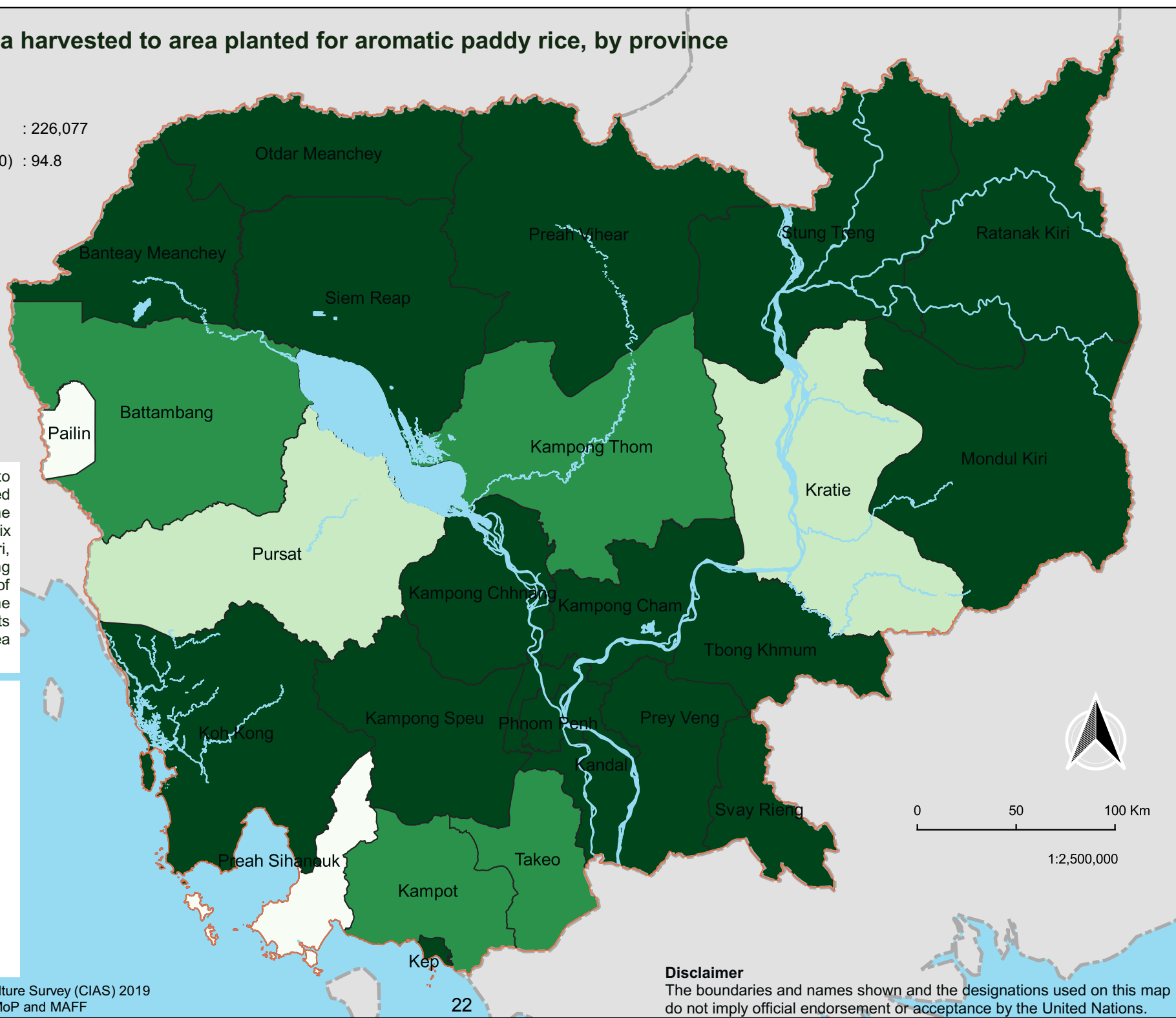Ratio of area harvested to area planted for aromatic paddy rice

- N/A
- ≤ 80.0
- 80.1 - 90.0
- 90.1 - 95.0
- > 95.0

1:2,500,000

0   50   100 Km

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
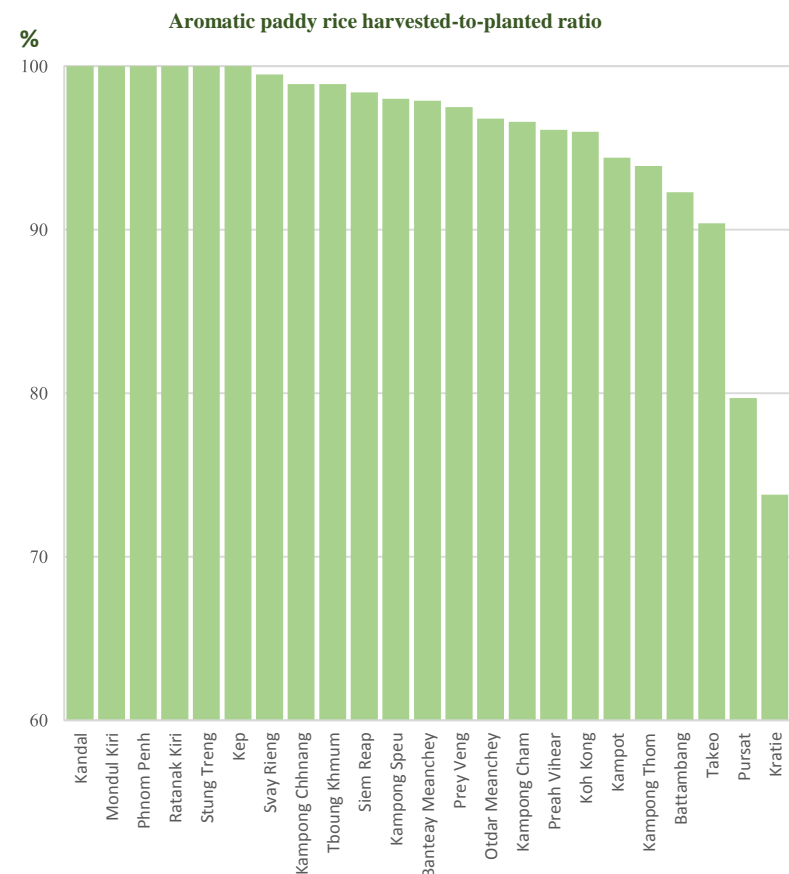National Institute of Statistics, MoP and MAFF

Disclaimer
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Table 3.2: Ratio of area harvested to area planted for aromatic paddy rice

Province code	Province name	Holdings reporting aromatic paddy rice production	Area harvested / area planted (x 100)
01	Banteay Meanchey	24,577	97.9
02	Battambang	26,409	92.3
03	Kampong Cham	9,317	96.6
04	Kampong Chhnang	16,293	98.9
05	Kampong Speu	18,952	98.0
06	Kampong Thom	14,161	93.9
07	Kampot	8,766	94.4
08	Kandal	162	100.0
09	Koh Kong	204	96.0
10	Kratie	1,920	73.8
11	Mondul Kiri	12	100.0
12	Phnom Penh	339	100.0
13	Preah Vihear	7,397	96.1
14	Prey Veng	27,944	97.5
15	Pursat	10,724	79.7
16	Ratanak Kiri	454	100.0
17	Siem Reap	24,585	98.4
18	Preah Sihanouk	0	N/A[i]
19	Stung Treng	153	100.0
20	Svay Rieng	6,532	99.5
21	Takeo	14,815	90.4
22	Otdar Meanchey	8,690	96.8
23	Kep	91	100.0
24	Pailin	0	N/A
25	Tboung Khmum	3,579	98.9

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Aromatic paddy rice harvested-to-planted ratio

[i] N/A: Not Applicable

Map 3.3: Aromatic paddy rice yield, by province

CAMBODIA:

|	
Number of holdings with aromatic paddy production	: 226,077
Aromatic paddy rice yield, in kilograms per hectare	: 2,613

In line with findings from map 3.1, Battambang and Banteay Meanchey provinces are among the provinces with the highest aromatic paddy yields (higher than 3 tonnes per ha). While a lower percentage of holdings reported growing aromatic paddy in Mondul Kiri and Kandal provinces, these two provinces also show high yields (around 4 tonnes per ha).

Legend

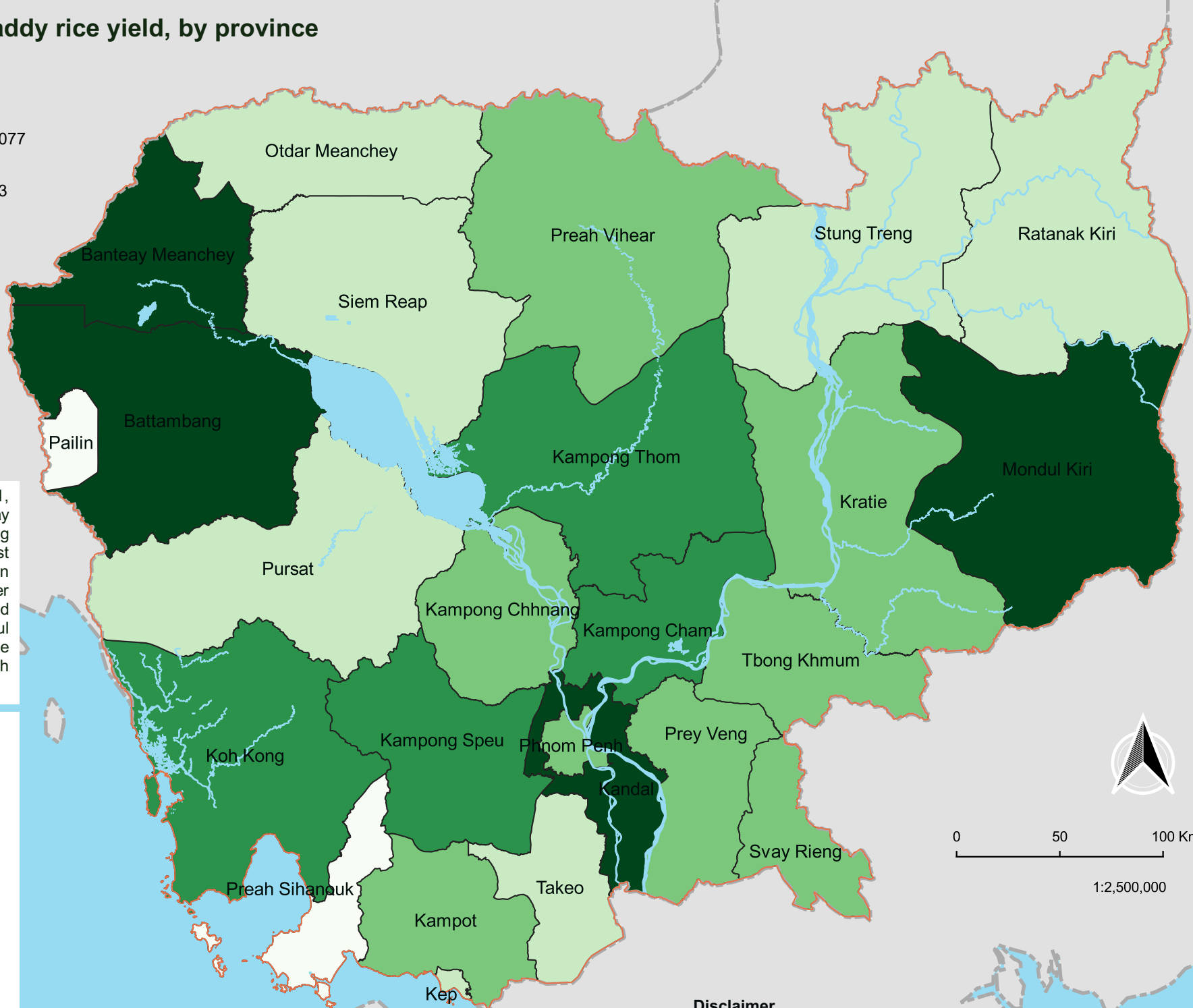— waterbody

Aromatic paddy rice yield, in kilograms per hectare

- N/A
- ≤ 2,000
- 2,001 - 2,500
- 2,501 - 3,000
- > 3,000

Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Battambang

Pailin

Pursat

Kampong Thom

Mondul Kiri

Kratie

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Kampot

Takeo

Kep

0   50   100 Km

1:2,500,000

24

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
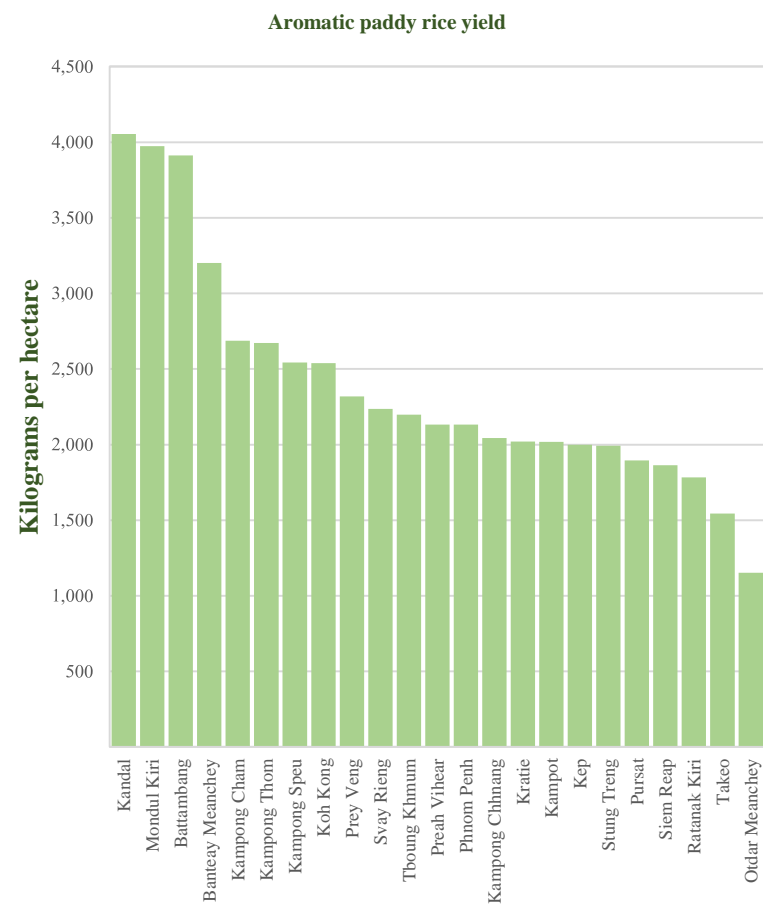National Institute of Statistics, MoP and MAFF

Disclaimer
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Table 3.3: Aromatic paddy rice yield

Province code	Province name	Holdings reporting aromatic paddy rice production	Aromatic paddy rice yield, in kilograms per hectare
01	Banteay Meanchey	24,577	3,201
02	Battambang	26,409	3,912
03	Kampong Cham	9,317	2,686
04	Kampong Chhnang	16,293	2,043
05	Kampong Speu	18,952	2,543
06	Kampong Thom	14,161	2,672
07	Kampot	8,766	2,019
08	Kandal	162	4,055
09	Koh Kong	204	2,538
10	Kratie	1,920	2,021
11	Mondul Kiri	12	3,973
12	Phnom Penh	339	2,132
13	Preah Vihear	7,397	2,133
14	Prey Veng	27.944	2,318
15	Pursat	10,724	1,895
16	Ratanak Kiri	454	1,784
17	Siem Reap	24,585	1,864
18	Preah Sihanouk	0	N/A[i]
19	Stung Treng	153	1,993
20	Svay Rieng	6,532	2,236
21	Takeo	14,815	1,543
22	Otdar Meanchey	8,690	1,152
23	Kep	91	2,000
24	Pailin	0	N/A
25	Tboung Khmum	3,579	2,197

Aromatic paddy rice yield

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

[i] N/A: Not Applicable

Map 3.4: Holdings reporting non-aromatic paddy rice production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
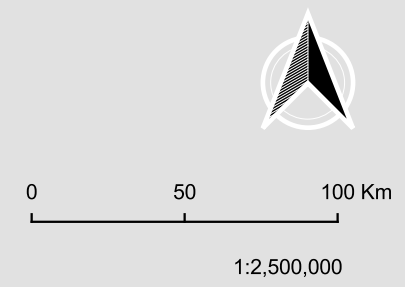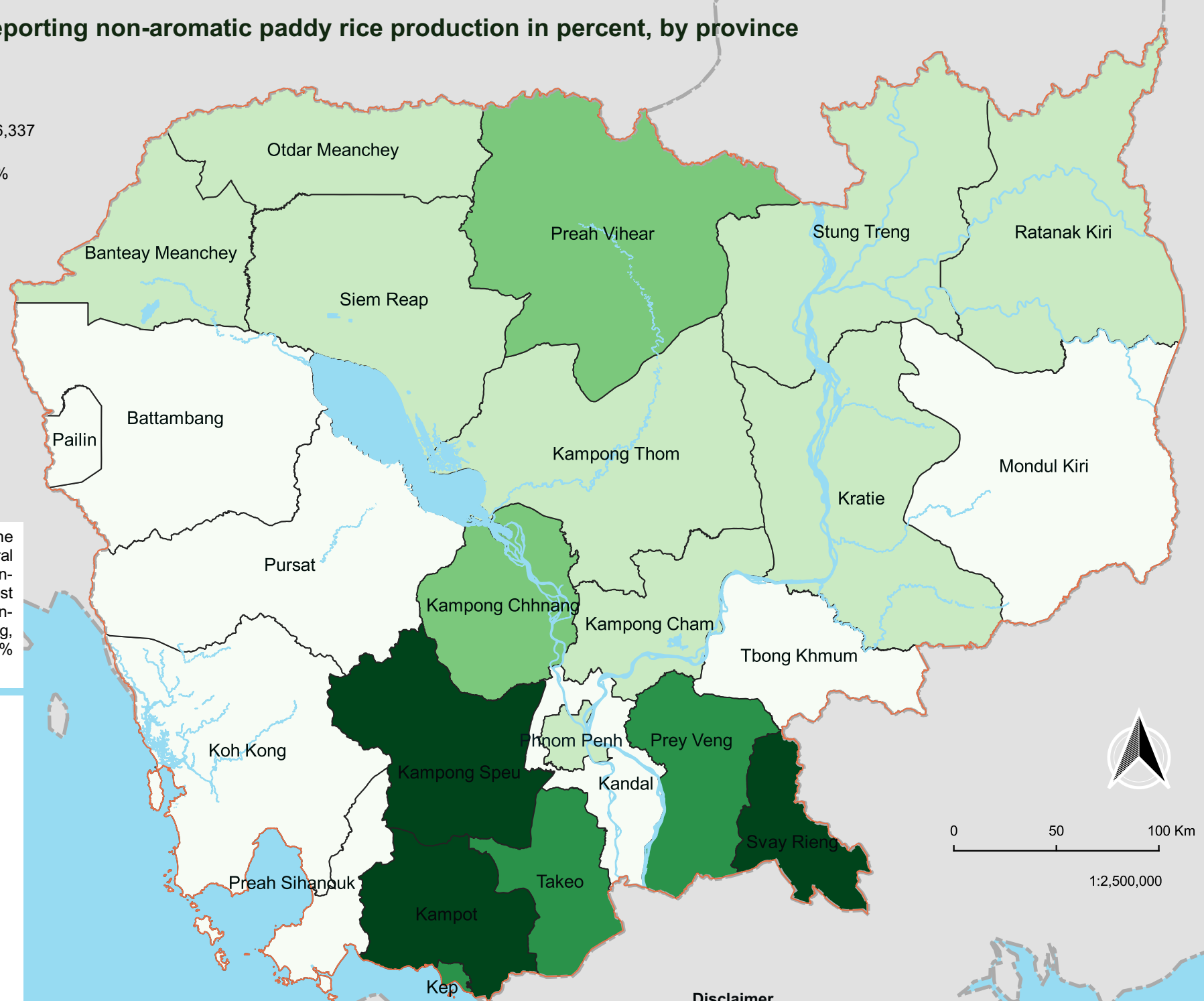reporting non-aromatic : 62.2%
paddy rice production

Slightly less than two thirds of the Cambodian household agricultural holdings are engaged in a non-aromatic paddy production. Almost nine in ten holdings grow non-aromatic paddy in Svay Rieng, while this rate only reaches 28.5% in Koh Kong (and 1.2% in Pailin).

Legend

Water

Holdings reporting non-aromatic
paddy rice production (%)

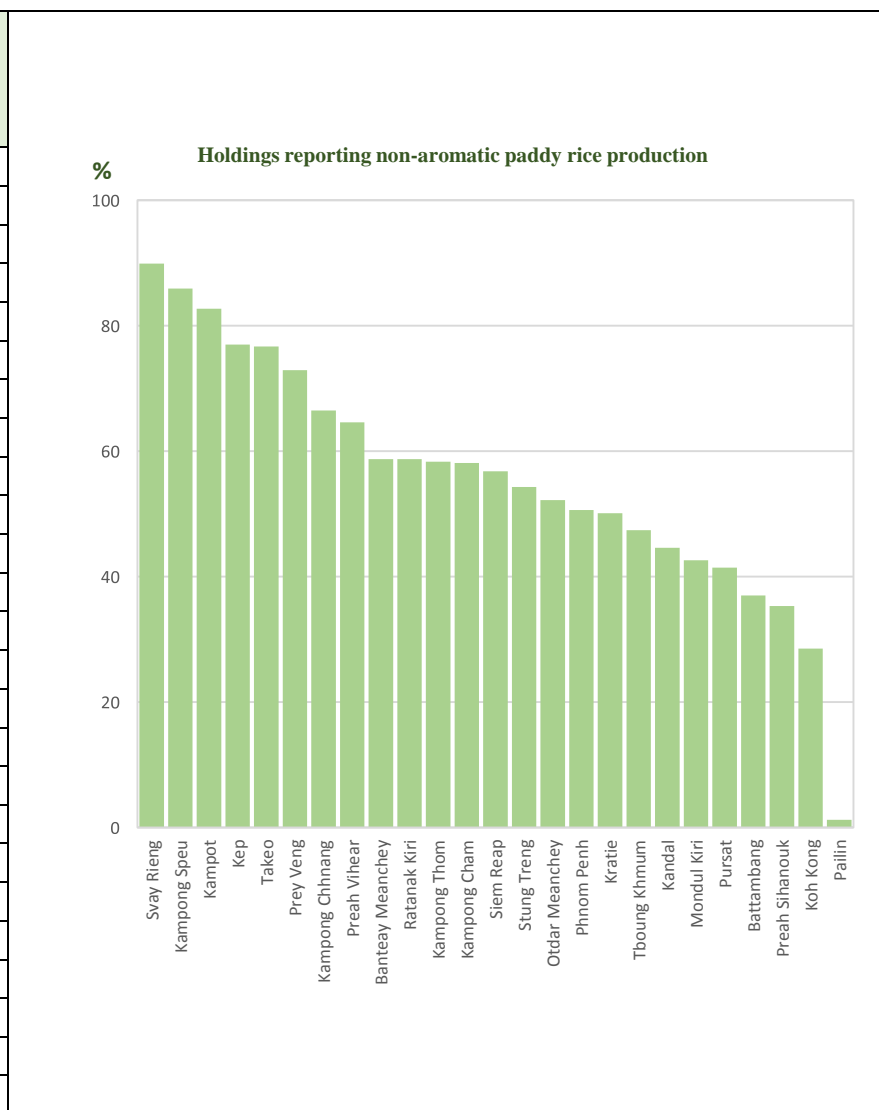- ≤ 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- > 80.0

Otdar Meanchey
Banteay Meanchey
Siem Reap
Preah Vihear
Stung Treng
Ratanak Kiri
Pailin
Battambang
Kampong Thom
Mondul Kiri
Kratie
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Phnom Penh
Prey Veng
Kampong Speu
Kandal
Svay Rieng
Preah Sihanouk
Takeo
Kampot
Kep

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Disclaimer
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0   50   100 Km

1:2,500,000

Table 3.4: Holdings reporting non-aromatic paddy rice production

Province code	Province name	Holdings reporting non-aromatic paddy rice production	Holdings reporting non-aromatic paddy rice production (%)
01	Banteay Meanchey	46,254	58.7
02	Battambang	38,428	37.0
03	Kampong Cham	68,090	58.1
04	Kampong Chhnang	53,690	66.5
05	Kampong Speu	117,674	85.9
06	Kampong Thom	69,501	58.3
07	Kampot	86,564	82.7
08	Kandal	47,526	44.6
09	Koh Kong	4,078	28.5
10	Kratie	21,340	50.1
11	Mondul Kiri	3,970	42.6
12	Phnom Penh	10,663	50.6
13	Preah Vihear	20,462	64.6
14	Prey Veng	100,943	72.9
15	Pursat	24,573	41.4
16	Ratanak Kiri	16,588	58.7
17	Siem Reap	71,651	56.8
18	Preah Sihanouk	3,894	35.3
19	Stung Treng	8,167	54.3
20	Svay Rieng	80,020	89.9
21	Takeo	108,876	76.7
22	Otdar Meanchey	18,850	52.2
23	Kep	3,848	77.0
24	Pailin	85	1.2
25	Tboung Khmum	48,535	47.4

Holdings reporting non-aromatic paddy rice production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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# Map 3.5: Ratio of area harvested to area planted for non-aromatic paddy rice, by province
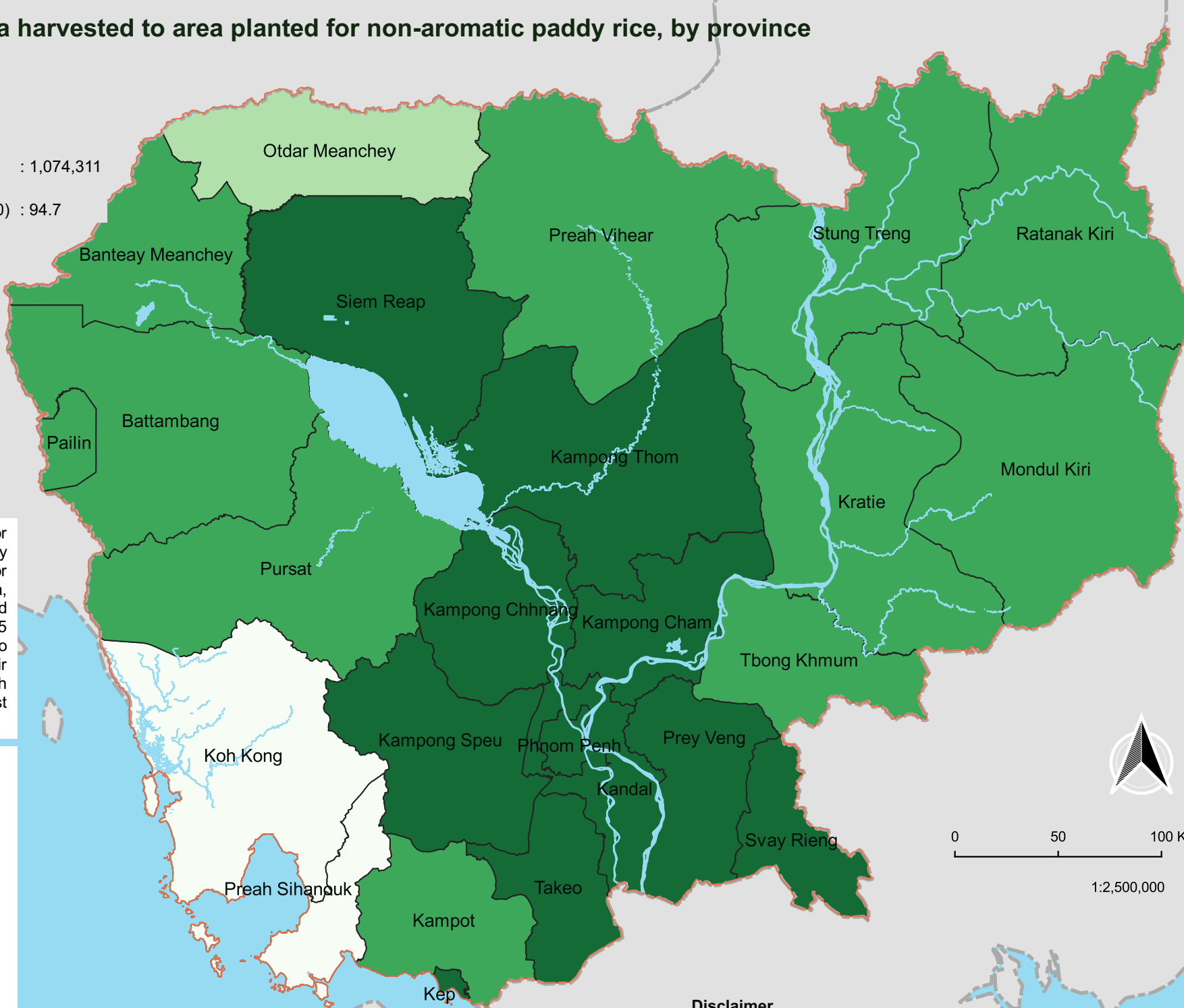
CAMBODIA:

Number of holdings with
non-aromatic paddy   : 1,074,311
production

Area harvested / area planted (x100) : 94.7

The harvest-to-planted ratio for non-aromatic paddy rice is very similar to the one calculated for aromatic paddy rice in Cambodia, and is close to 100%. Sampled holdings from 20 of the 25 provinces of Cambodia managed to harvest more than 90% of their planted area. Holdings from Preah Sihanouk reported the lowest harvest-to-planted ratio, at 68.1%.

Legend

	Water

Ratio of area harvested to area planted
for non-aromatic paddy rice

	≤ 75.0
	75.1 - 85.0
	85.1 - 95.0
	> 95.0

Otdar Meanchey
Banteay Meanchey
Preah Vihear
Stung Treng
Ratanak Kiri
Siem Reap
Pailin
Battambang
Kampong Thom
Mondul Kiri
Kratie
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Svay Rieng
Preah Sihanouk
Takeo
Kampot
Kep

0   50   100 Km

1:2,500,000

Disclaimer
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Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
         National Institute of Statistics, MoP and MAFF

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Table 3.5: Ratio of area harvested to area planted for non-aromatic paddy rice

Province code	Province name	Holdings reporting for non-aromatic paddy rice production	Area harvested / area planted (x 100)
01	Banteay Meanchey	46,254	91.7
02	Battambang	38,428	93.0
03	Kampong Cham	68,090	98.1
04	Kampong Chhnang	53,690	96.7
05	Kampong Speu	117,674	99.3
06	Kampong Thom	69,501	95.4
07	Kampot	86,564	93.0
08	Kandal	47,526	99.5
09	Koh Kong	4,078	73.8
10	Kratie	21,340	93.2
11	Mondul Kiri	3,970	94.0
12	Phnom Penh	10,663	98.2
13	Preah Vihear	20,462	88.0
14	Prey Veng	100,943	99.1
15	Pursat	24,573	90.0
16	Ratanak Kiri	16,588	93.2
17	Siem Reap	71,651	97.8
18	Preah Sihanouk	3,894	68.1
19	Stung Treng	8,167	93.9
20	Svay Rieng	80,020	98.6
21	Takeo	108,876	96.0
22	Otdar Meanchey	18,850	76.5
23	Kep	3,848	100.0
24	Pailin	85	89.8
25	Tboung Khmum	48,576	93.8
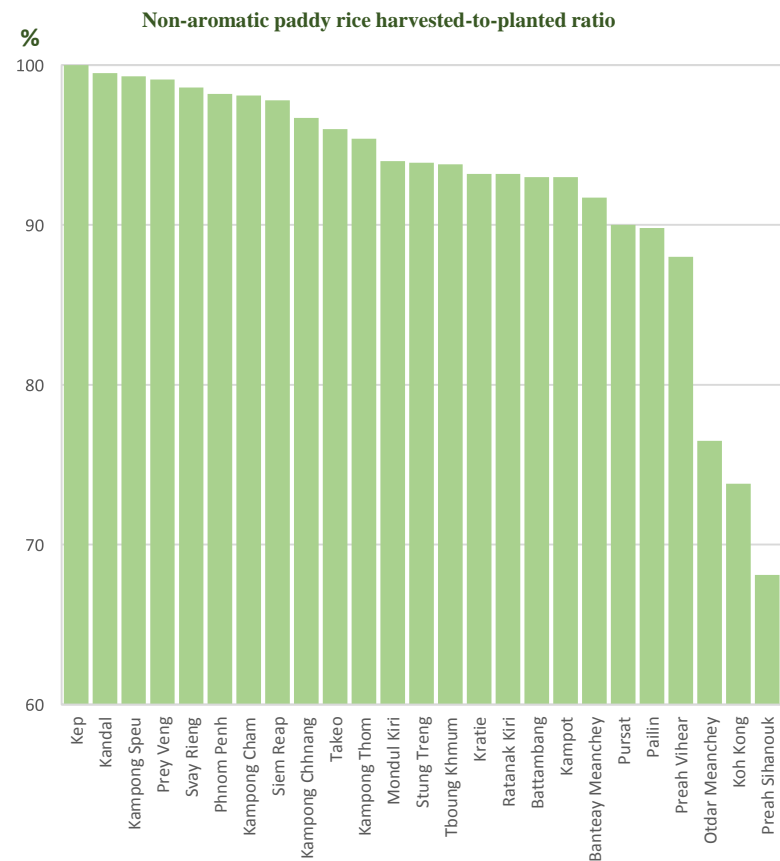
Non-aromatic paddy rice harvested-to-planted ratio

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 3.6.: Non-aromatic paddy rice yield, by province

CAMBODIA:

Number of holdings with aromatic paddy production : 1,074,311

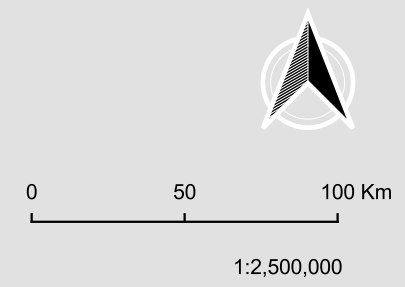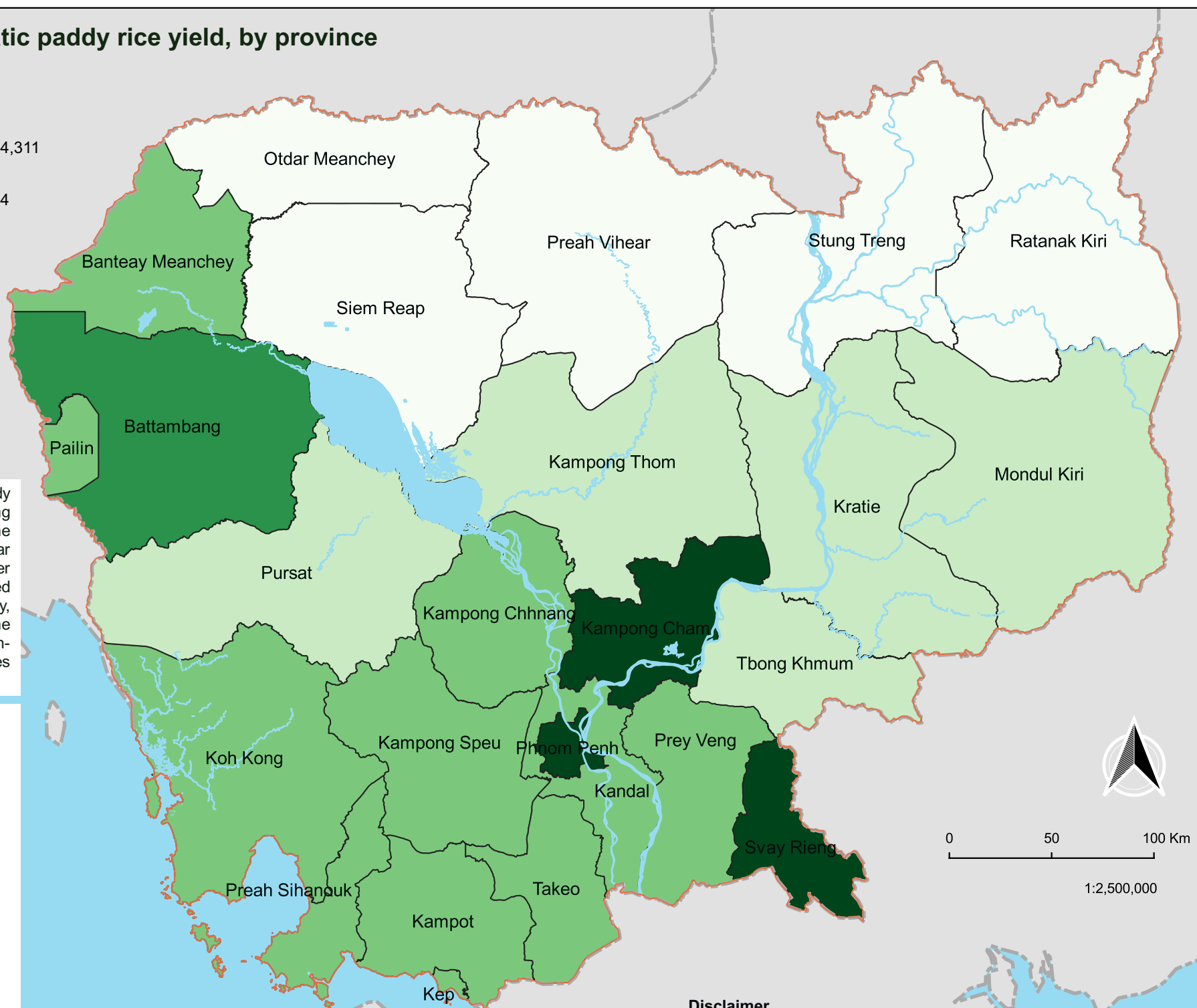Non-aromatic paddy rice yield, in kilograms per hectare : 2,514

The highest non-aromatic paddy yields can be found in Svay Rieng (over 4 tonnes per ha), while the lowest yields are reached in Otdar Meanchey (less than 1 tonne per ha). Similar to what was displayed on map 3.3 for aromatic paddy, Battambang is again one of the provinces with the highest non-aromatic paddy yield (2.7 tonnes per ha).

Legend

Water

Non-aromatic paddy rice yield, in kilograms per hectare

- ≤ 1,500
- 1,501 - 2,000
- 2,001 - 2,500
- 2,501 - 3,000
- > 3,000

Otdar Meanchey
Preah Vihear
Stung Treng
Ratanak Kiri
Banteay Meanchey
Siem Reap
Battambang
Pailin
Kampong Thom
Mondul Kiri
Kratie
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Preah Sihanouk
Takeo
Svay Rieng
Kampot
Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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Table 3.6: Non-aromatic paddy rice yield

Province code	Province name	Holdings reporting non-aromatic paddy rice production	Non- aromatic paddy yield, in kilograms per hectare
01	Banteay Meanchey	46,254	2,444
02	Battambang	38,428	2,755
03	Kampong Cham	68,090	3,690
04	Kampong Chhnang	53,690	2,474
05	Kampong Speu	117,674	2,209
06	Kampong Thom	69,501	1,907
07	Kampot	86,564	2,250
08	Kandal	47,526	2,140
09	Koh Kong	4,078	2,011
10	Kratie	21,340	1,632
11	Mondul Kiri	3,970	1,712
12	Phnom Penh	10,663	3,543
13	Preah Vihear	20,462	1,348
14	Prey Veng	100,943	2,132
15	Pursat	24,573	1,741
16	Ratanak Kiri	16,588	1,412
17	Siem Reap	71,651	1,113
18	Preah Sihanouk	3,894	2,189
19	Stung Treng	8,167	1,412
20	Svay Rieng	80,020	4,283
21	Takeo	108,876	2,342
22	Otdar Meanchey	18,850	973
23	Kep	3,848	2,053
24	Pailin	85	2,300
25	Tboung Khmum	48,535	1,960
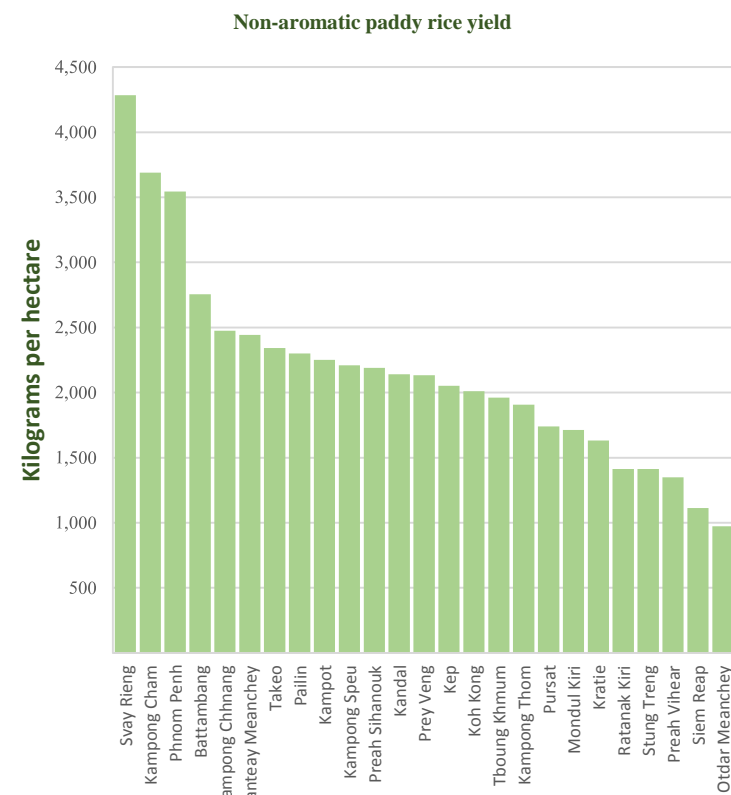
Non-aromatic paddy rice yield

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 3.7: Holdings reporting cassava production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings reporting cassava production : 9.6%

Cassava is mostly grown in the northern provinces of Cambodia, with over 58% of the holdings engaged in such crop production in Otdar Meanchey. Cassava was not reported by the sampled holdings in Phnom Penh and Kep provinces.

Legend

Water

Holdings reporting cassava production (%)

- ≤ 10.0
- 10.1 - 15.0
- 15.1 - 20.0
- 20.1 - 25.0
- > 25.0

Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Pailin

Battambang

Kampong Thom

Kratie

Mondul Kiri

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

0   50   100 Km

1:2,500,000

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Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF
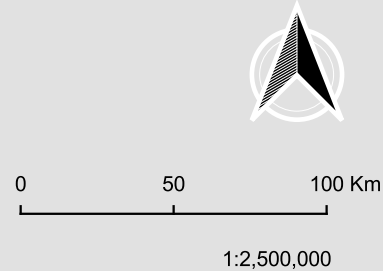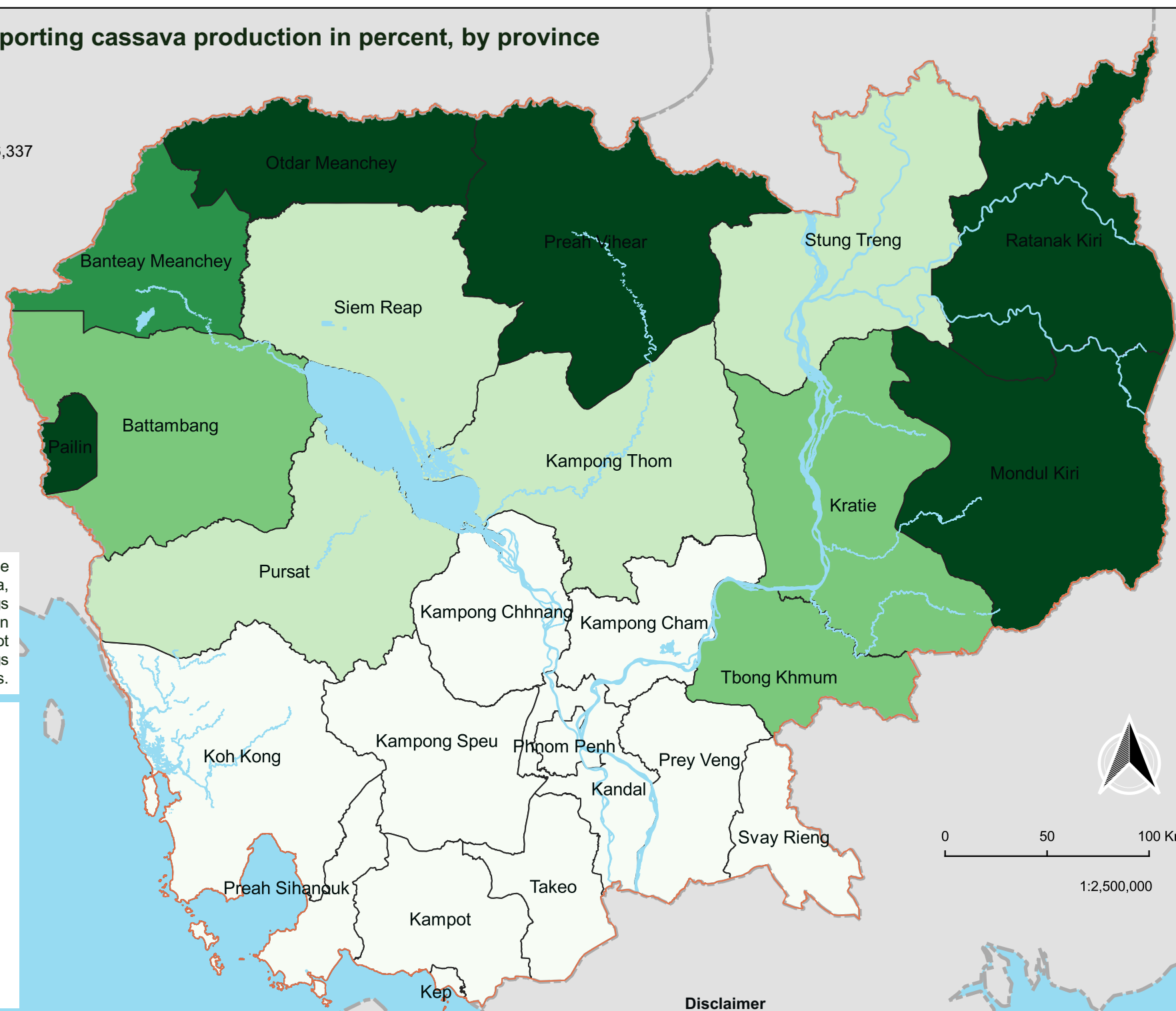
Table 3.7: Holdings reporting cassava production

Province code	Province name	Holdings reporting cassava production	Holdings reporting cassava production (%)
01	Banteay Meanchey	19,172	24.3
02	Battambang	18,601	17.9
03	Kampong Cham	5,405	4.6
04	Kampong Chhnang	523	0.6
05	Kampong Speu	1,442	1.1
06	Kampong Thom	16,346	13.7
07	Kampot	1,875	1.8
08	Kandal	258	0.2
09	Koh Kong	393	2.8
10	Kratie	7,373	17.3
11	Mondul Kiri	2,562	27.5
12	Phnom Penh	0	0.0
13	Preah Vihear	12,432	39.3
14	Prey Veng	1,058	0.8
15	Pursat	6,951	11.7
16	Ratanak Kiri	7,696	27.2
17	Siem Reap	16,865	13.4
18	Preah Sihanouk	126	1.1
19	Stung Treng	1,630	10.8
20	Svay Rieng	1,287	1.4
21	Takeo	1,934	1.4
22	Otdar Meanchey	20,991	58.1
23	Kep	0	0.0
24	Pailin	3,339	48.9
25	Tboung Khmum	16,905	16.5
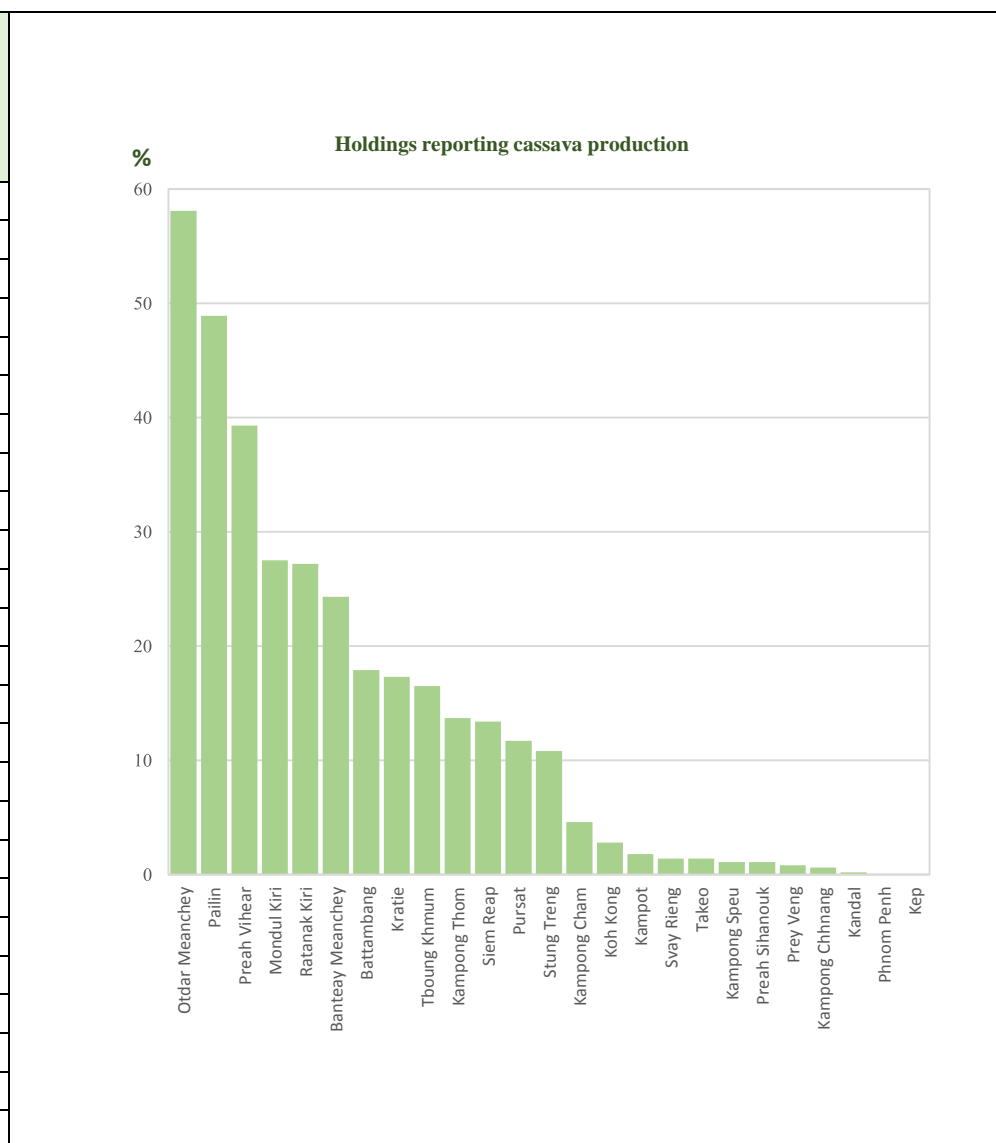
Holdings reporting cassava production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
        National Institute of Statistics, MoP and MAFF

# Map 3.8: Holdings reporting cashew production in percent, by province
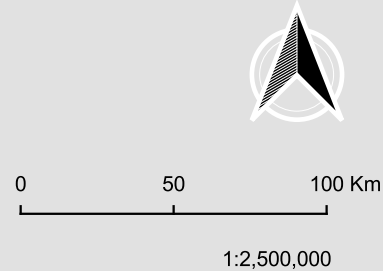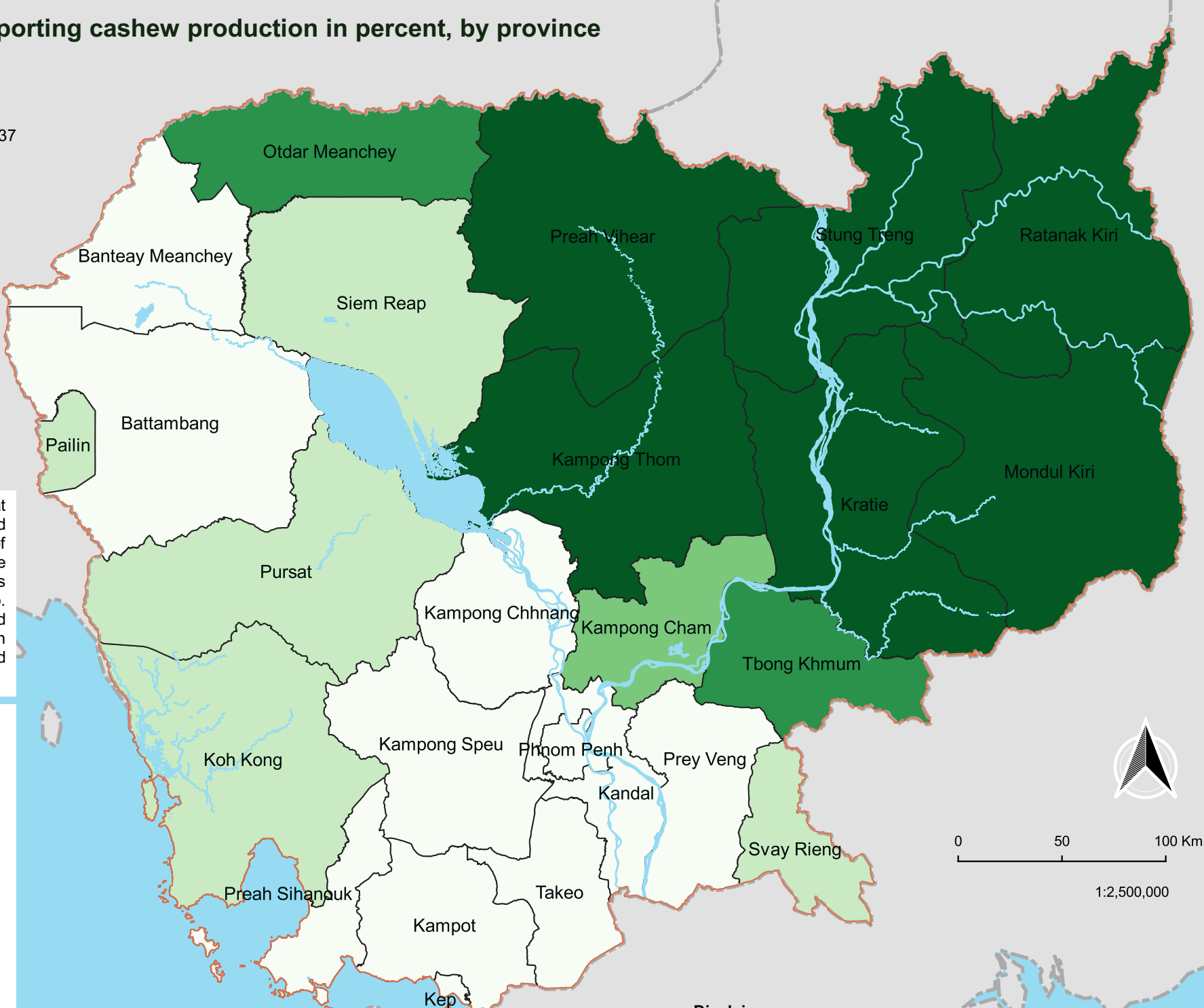
CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings reporting cashew production : 8.3%

This map clearly shows that cashew production is concentrated in the north-eastern provinces of Cambodia, with for example more than two thirds of Ratanak Kiri's holdings growing this crop. Cashew production was reported by only 0.1% of the holdings in Banteay Meanchey, Takeo and Kep.

Legend

- Water

Holdings reporting cashew production (%)

- ≤ 5.0
- 5.1 - 10.0
- 10.1 - 15.0
- 15.1 - 20.0
- > 20.0

Otdar Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Banteay Meanchey

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

0   50   100 Km

1:2,500,000

Disclaimer

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Table 3.8: Holdings reporting cashew production

Province code	Province name	Holdings reporting cashew production	Holdings reporting cashew production (%)
01	Banteay Meanchey	79	0.1
02	Battambang	1,483	1.4
03	Kampong Cham	14,157	12.1
04	Kampong Chhnang	4,115	5.1
05	Kampong Speu	28	0.0
06	Kampong Thom	24,463	20.5
07	Kampot	1,697	1.6
08	Kandal	0	0.0
09	Koh Kong	979	6.9
10	Kratie	12,859	30.2
11	Mondul Kiri	3,542	38.0
12	Phnom Penh	0	0.0
13	Preah Vihear	10,536	33.3
14	Prey Veng	1,184	0.9
15	Pursat	3,589	6.1
16	Ratanak Kiri	19,141	67.7
17	Siem Reap	9,949	7.9
18	Preah Sihanouk	253	2.3
19	Stung Treng	7,002	46.6
20	Svay Rieng	4,718	5.3
21	Takeo	146	0.1
22	Otdar Meanchey	6,902	19.1
23	Kep	7	0.1
24	Pailin	432	6.3
25	Tboung Khmum	16,029	15.7
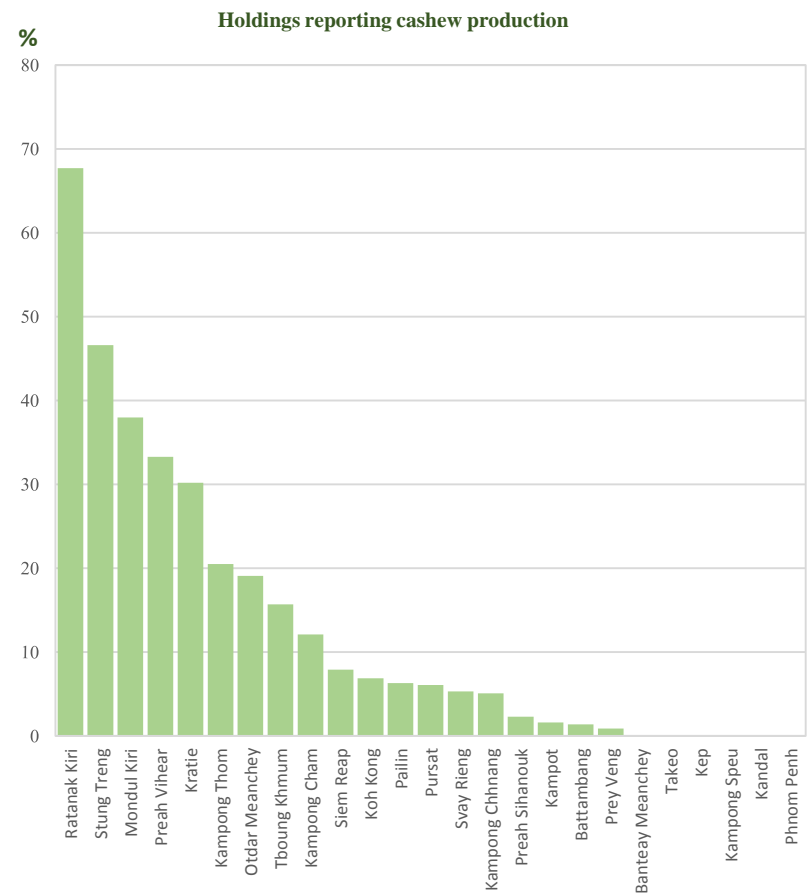
Holdings reporting cashew production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 3.9: Holdings reporting coconut production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
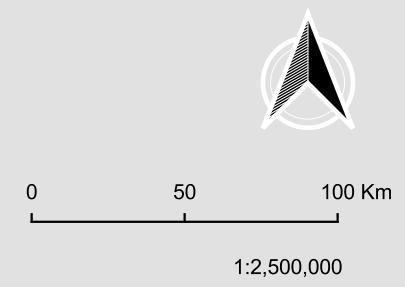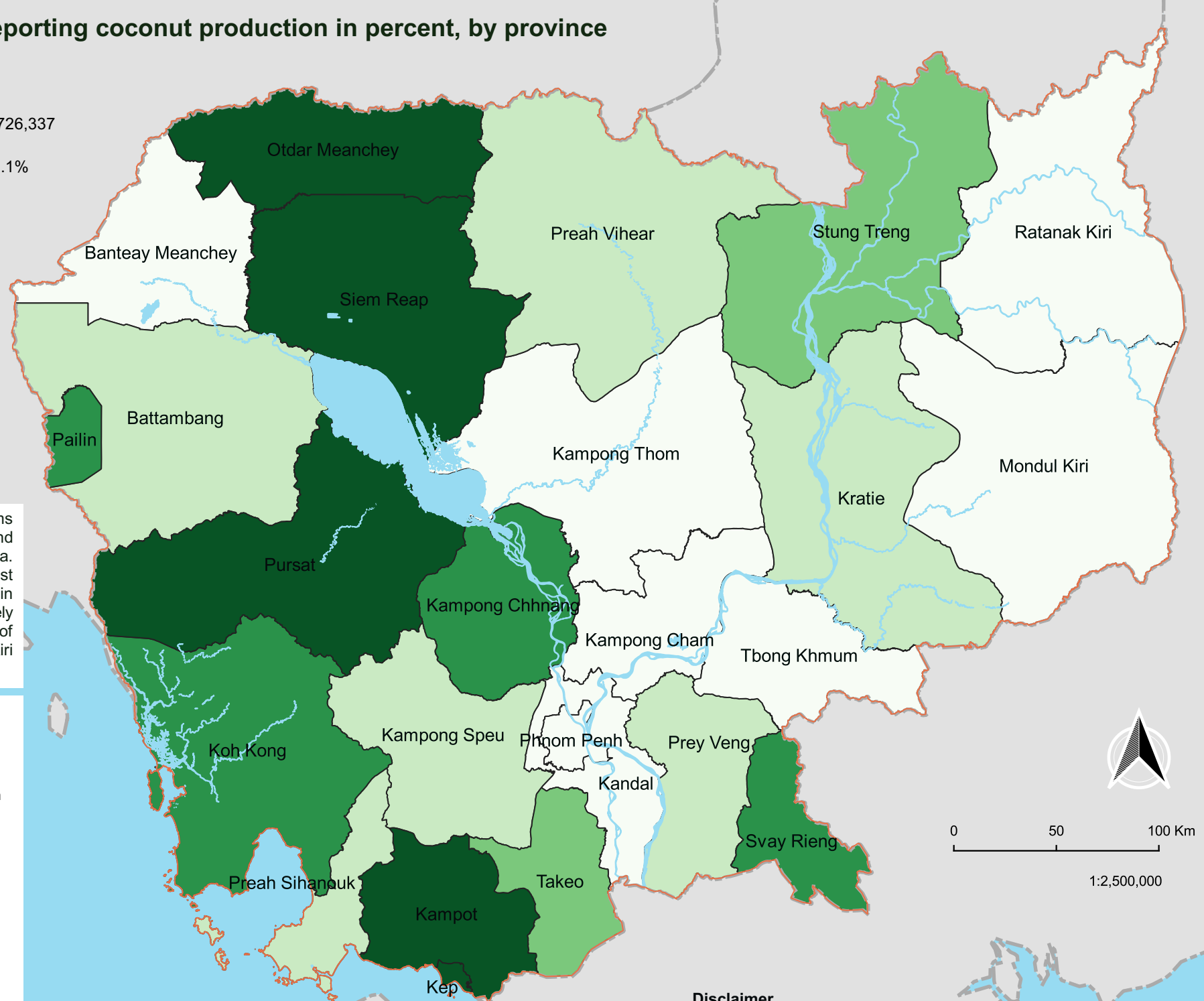reporting coconut : 12.1%
production

Coconut production seems predominant in the western and southern provinces of Cambodia. Kep and Kampot show the highest rates of holdings engaged in coconut production (respectively 45.4% and 43.0%). Only 1.0% of the holdings in Ratanak Kiri reported a coconut production.

Legend

Water

Holdings reporting coconut production (%)

≤ 5.0

5.1 - 10.0

10.1 - 15.0

15.1 - 20.0

> 20.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

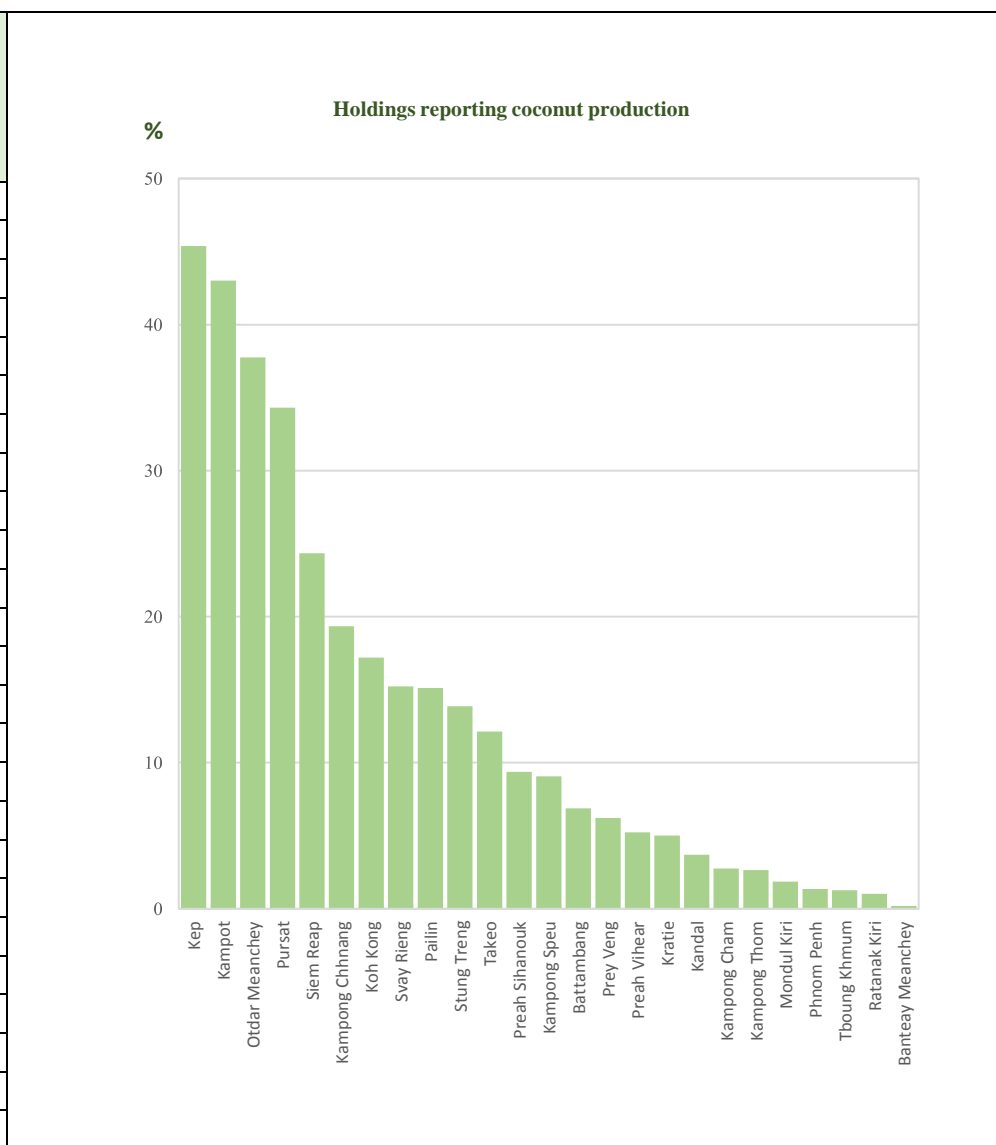Kampot

Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Disclaimer
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Table 3.9: Holdings reporting coconut production

Province code	Province name	Holdings reporting coconut production	Holdings reporting coconut production (%)
01	Banteay Meanchey	148	0.2
02	Battambang	7,151	6.9
03	Kampong Cham	3,241	2.8
04	Kampong Chhnang	15,614	19.4
05	Kampong Speu	12,406	9.1
06	Kampong Thom	3,148	2.6
07	Kampot	45,002	43.0
08	Kandal	3,931	3.7
09	Koh Kong	2,457	17.2
10	Kratie	2,137	5.0
11	Mondul Kiri	174	1.9
12	Phnom Penh	284	1.3
13	Preah Vihear	1,656	5.2
14	Prey Veng	8,627	6.2
15	Pursat	20,359	34.3
16	Ratanak Kiri	289	1.0
17	Siem Reap	30,702	24.3
18	Preah Sihanouk	1,034	9.4
19	Stung Treng	2,085	13.9
20	Svay Rieng	13,551	15.2
21	Takeo	17,243	12.1
22	Otdar Meanchey	13,642	37.8
23	Kep	2,267	45.4
24	Pailin	1,032	15.1
25	Tboung Khmum	1,291	1.3

Holdings reporting coconut production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 3.10: Holdings reporting rubber production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
reporting rubber : 2.0%
production

Rubber production concerns only 2.0% of the household holdings in Cambodia, and is mostly concentrated in Tboung Khmum (26.4%), Koh Kong and the north-eastern provinces.

Legend

Water

Holdings reporting rubber production (%)

≤ 1.0

1.1 - 3.0

3.1 - 5.0

> 5.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Kratie

Mondul Kiri

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Preah Sihanouk

Takeo

Svay Rieng

Kampot

Kep

0   50   100 Km

1:2,500,000

Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF
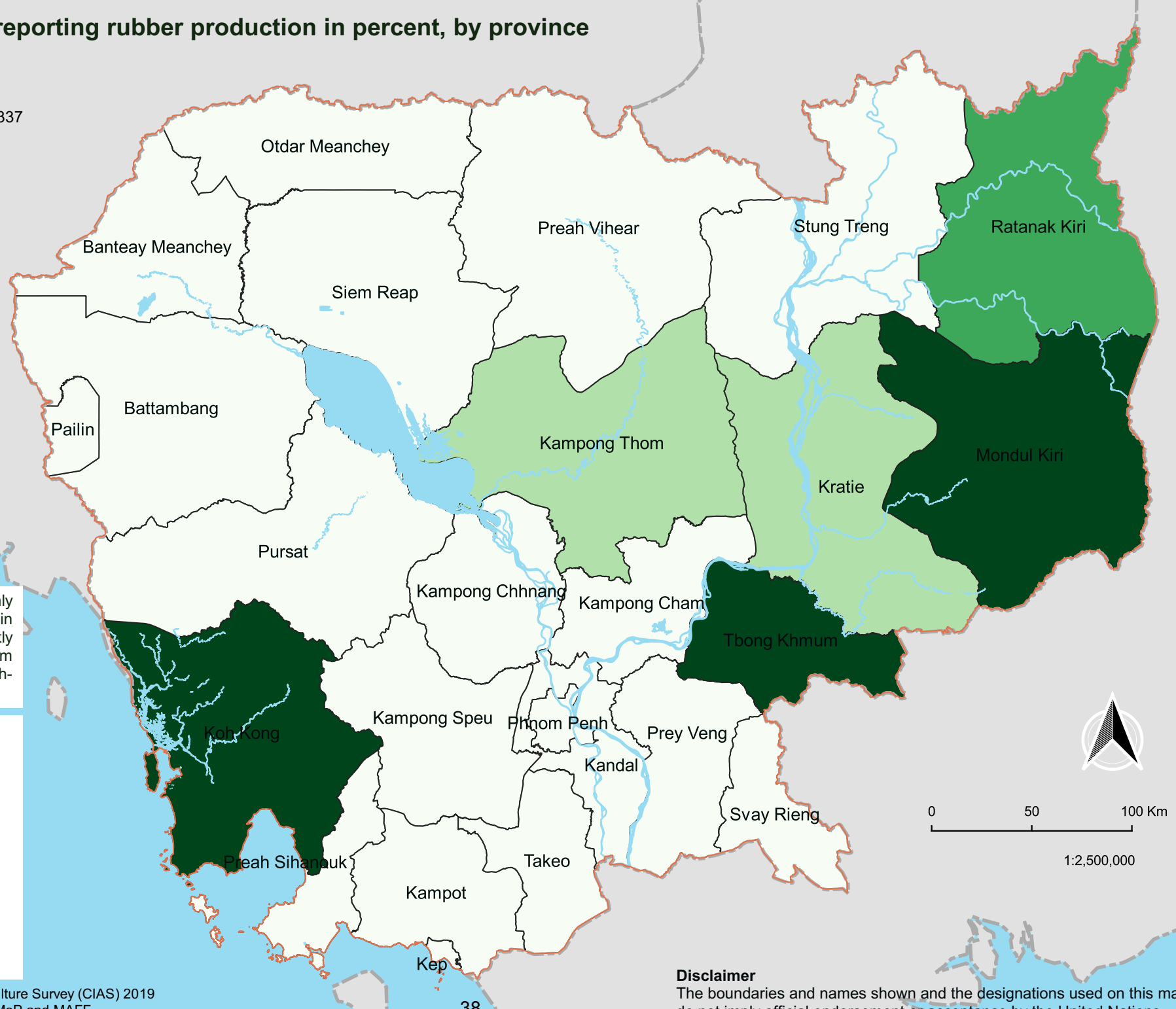
Table 3.10: Holdings reporting rubber production

Province code	Province name	Holdings reporting rubber production	Holdings reporting rubber production (%)
01	Banteay Meanchey	27	0.0
02	Battambang	226	0.2
03	Kampong Cham	1,062	0.9
04	Kampong Chhnang	0	0.0
05	Kampong Speu	25	0.0
06	Kampong Thom	1,553	1.3
07	Kampot	27	0.0
08	Kandal	0	0.0
09	Koh Kong	1,073	7.5
10	Kratie	927	2.2
11	Mondul Kiri	996	10.7
12	Phnom Penh	0	0.0
13	Preah Vihear	0	0.0
14	Prey Veng	278	0.2
15	Pursat	0	0.0
16	Ratanak Kiri	1,206	4.3
17	Siem Reap	0	0.0
18	Preah Sihanouk	0	0.0
19	Stung Treng	18	0.1
20	Svay Rieng	116	0.1
21	Takeo	0	0.0
22	Otdar Meanchey	0	0.0
23	Kep	0	0.0
24	Pailin	29	0.4
25	Tboung Khmum	27,009	26.4
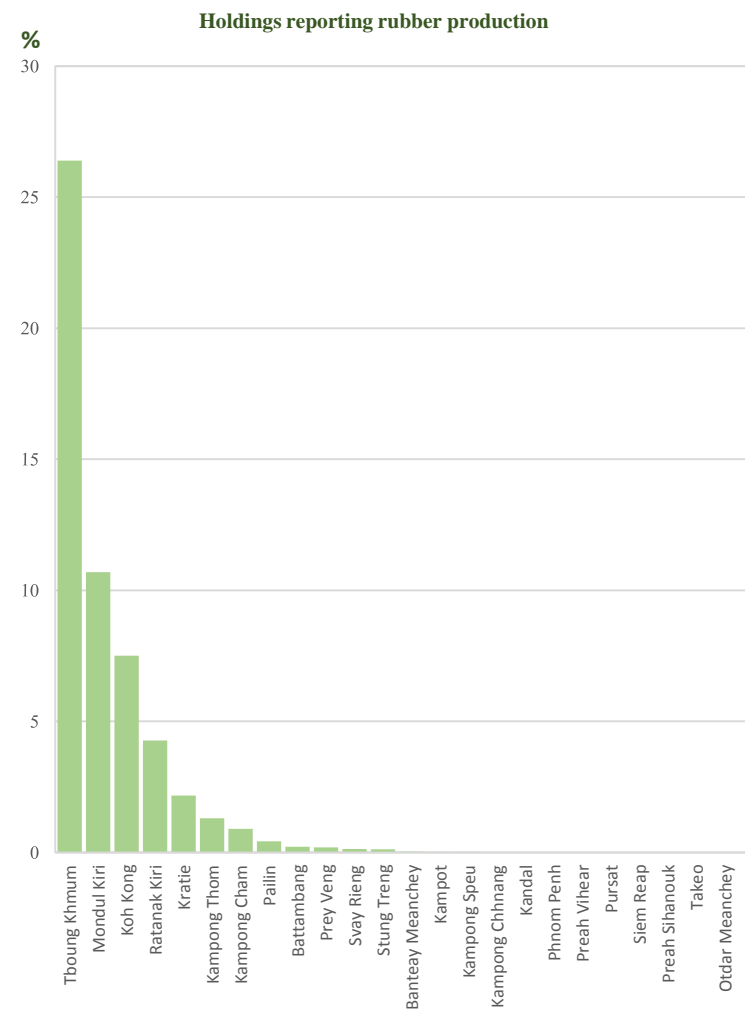
Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Holdings reporting rubber production

Map 3.11: Holdings reporting banana production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings : 17.5%
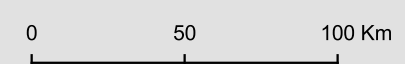with banana production

Bananas are produced in most of the Cambodian provinces, with Oddar Meanchey and Pursat showing the highest rates (respectively 45.2% and 37.0%). On the contrary, only 0.7% of the holdings in Ratanak Kiri reported growing bananas.

Legend

Water	(blue)

Holdings reporting banana production (%)

≤ 5.0	
5.1 - 10.0	
10.1 - 15.0	
15.1 - 20.0	
> 20.0	
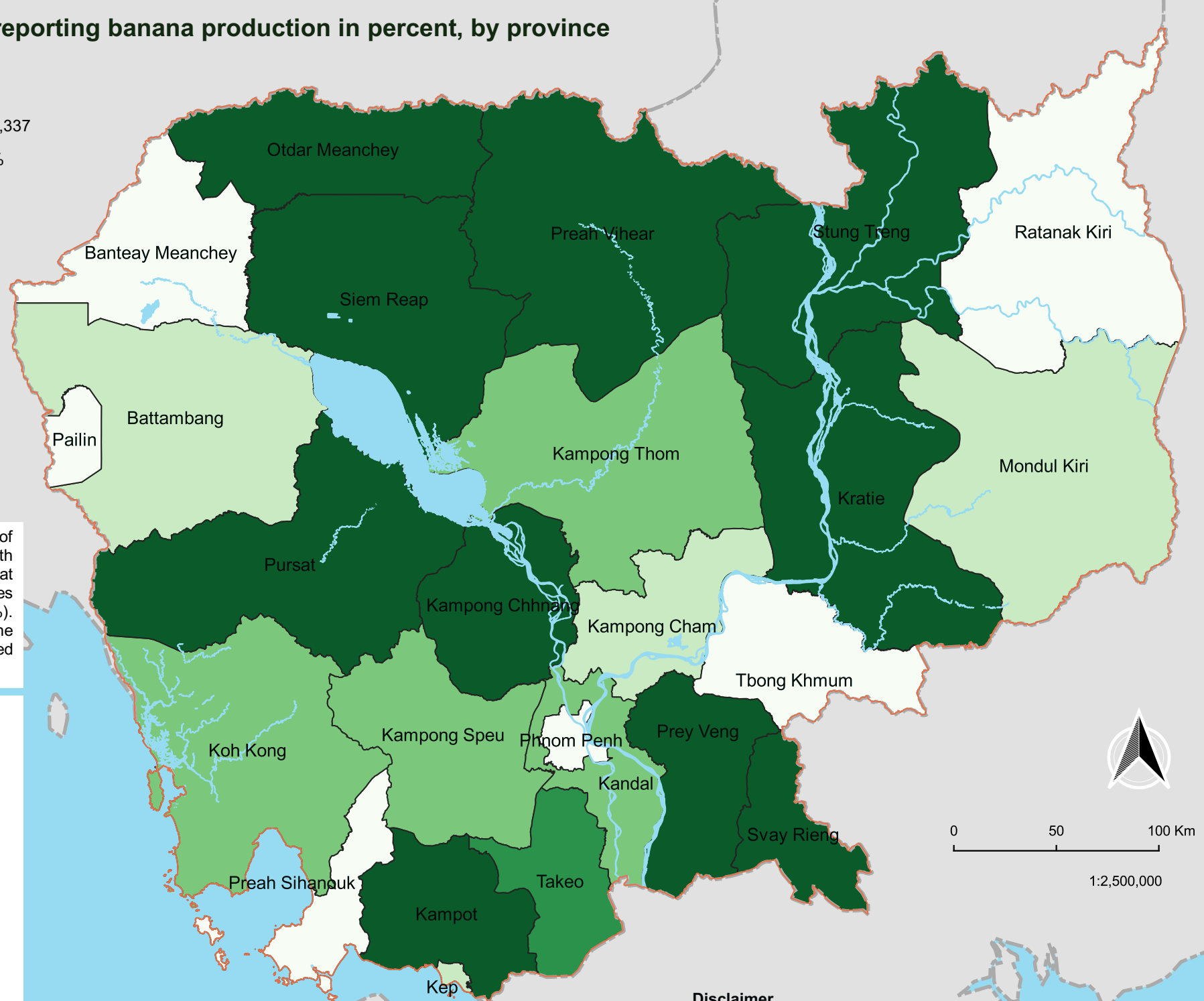
Otdar Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Banteay Meanchey

Siem Reap

Battambang

Pailin

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Koh Kong

Kampong Speu

Phnom Penh

Tbong Khmum

Prey Veng

Kandal

Preah Sihanouk

Takeo

Svay Rieng

Kampot

Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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Disclaimer
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Table 3.11: Holdings reporting banana production

Province code	Province name	Holdings reporting banana production	Holdings reporting banana production (%)
01	Banteay Meanchey	1,625	2.1
02	Battambang	7,356	7.1
03	Kampong Cham	9,403	8.0
04	Kampong Chhnang	23,128	28.7
05	Kampong Speu	20,513	15.0
06	Kampong Thom	14,829	12.4
07	Kampot	25,370	24.2
08	Kandal	10,662	10.0
09	Koh Kong	1,956	13.7
10	Kratie	11,815	27.7
11	Mondul Kiri	630	6.8
12	Phnom Penh	839	4.0
13	Preah Vihear	6,536	20.6
14	Prey Veng	28,102	20.3
15	Pursat	21,973	37.0
16	Ratanak Kiri	193	0.7
17	Siem Reap	41,713	33.1
18	Preah Sihanouk	487	4.4
19	Stung Treng	3,139	20.9
20	Svay Rieng	27,809	31.2
21	Takeo	23,911	16.8
22	Otdar Meanchey	16,322	45.2
23	Kep	379	7.6
24	Pailin	304	4.5
25	Tboung Khmum	2,421	2.4

Holdings reporting banana productiona

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 3.12: Holdings reporting mango production in percent, by province

CAMBODIA:

Total number of holdings   1,726,337
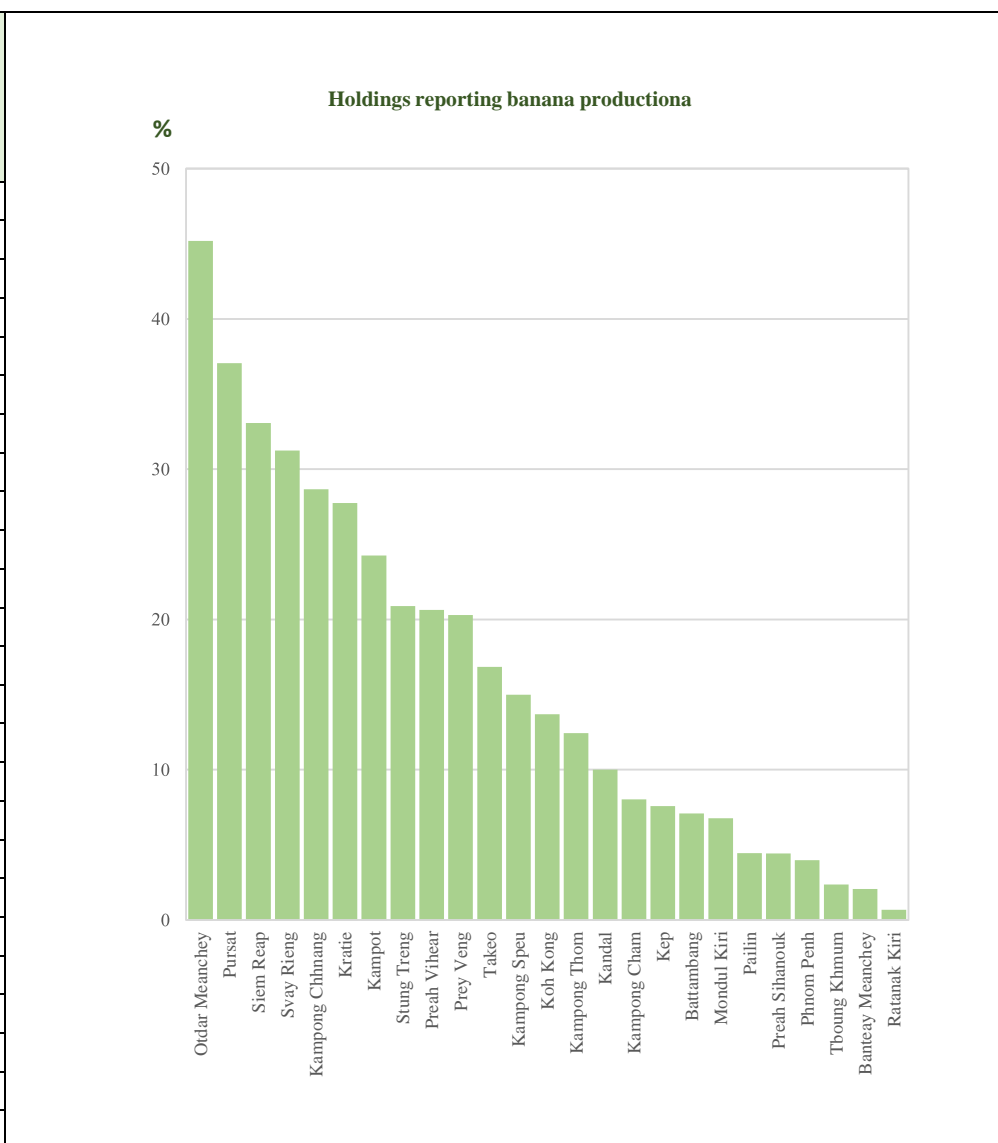
Percentage of holdings reporting mango production   18.9%

Mangoes are produced in most Cambodian provinces. The provinces with the highest rates of holdings reporting growing mangoes are Otdar Meanchey and Kep (higher than 50%), while mango production was reported by less than 1% of the holdings in Mondul Kiri and Ratanak Kiri.

Legend

Water

Holdings reporting mango production (%)

- ≤ 10.0
- 10.1 - 15.0
- 15.1 - 20.0
- 20.1 - 25.0
- > 25.0

Provinces labeled: Otdar Meanchey, Banteay Meanchey, Preah Vihear, Stung Treng, Ratanak Kiri, Siem Reap, Pailin, Battambang, Kampong Thom, Mondul Kiri, Kratie, Pursat, Kampong Chhnang, Kampong Cham, Tbong Khmum, Koh Kong, Kampong Speu, Phnom Penh, Prey Veng, Kandal, Preah Sihanouk, Kampot, Takeo, Svay Rieng, Kep

0   50   100 Km

1:2,500,000

Disclaimer
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Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
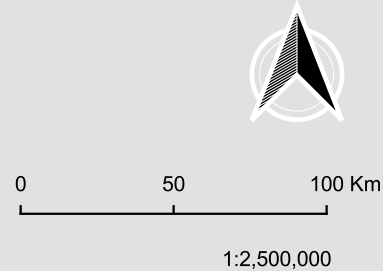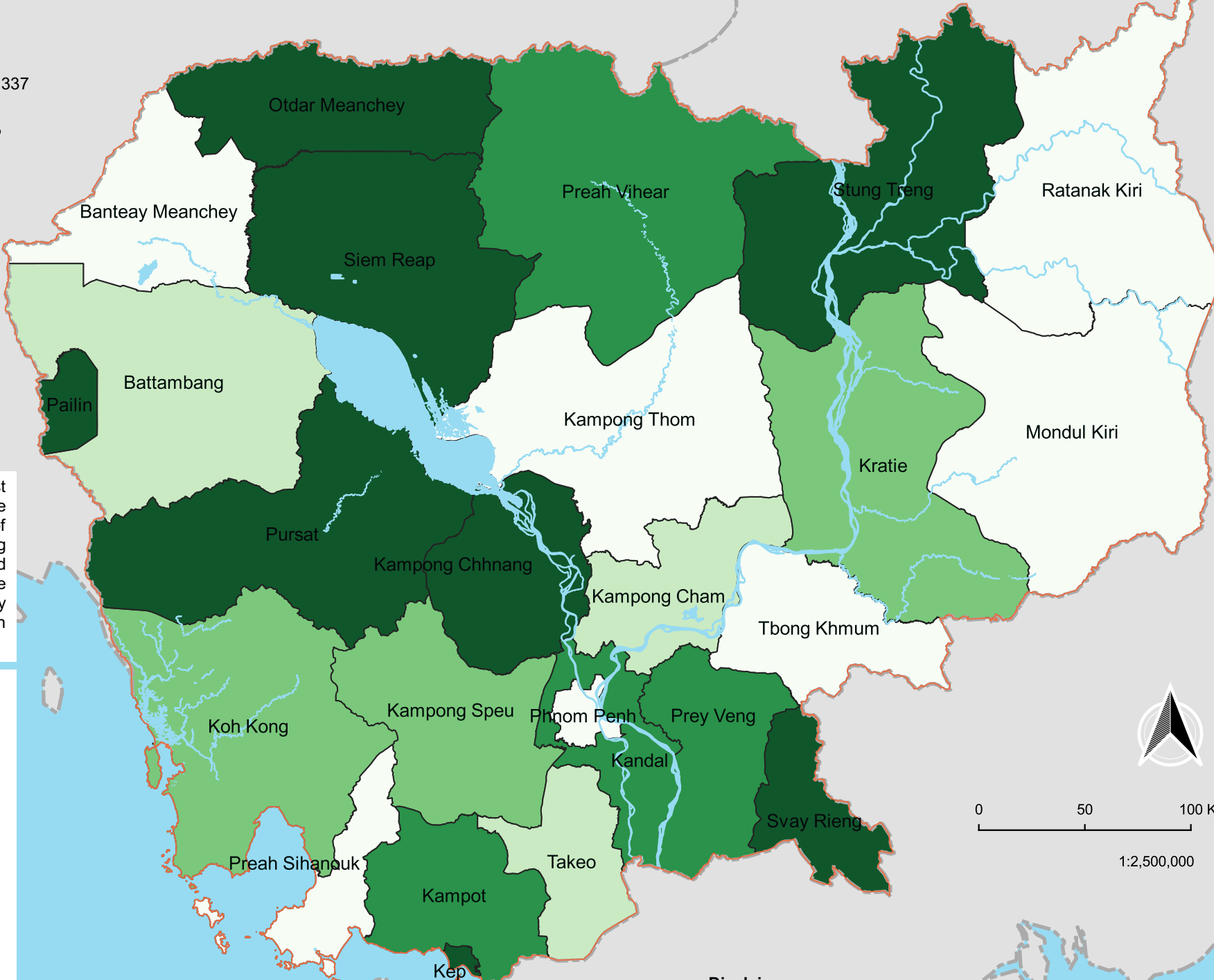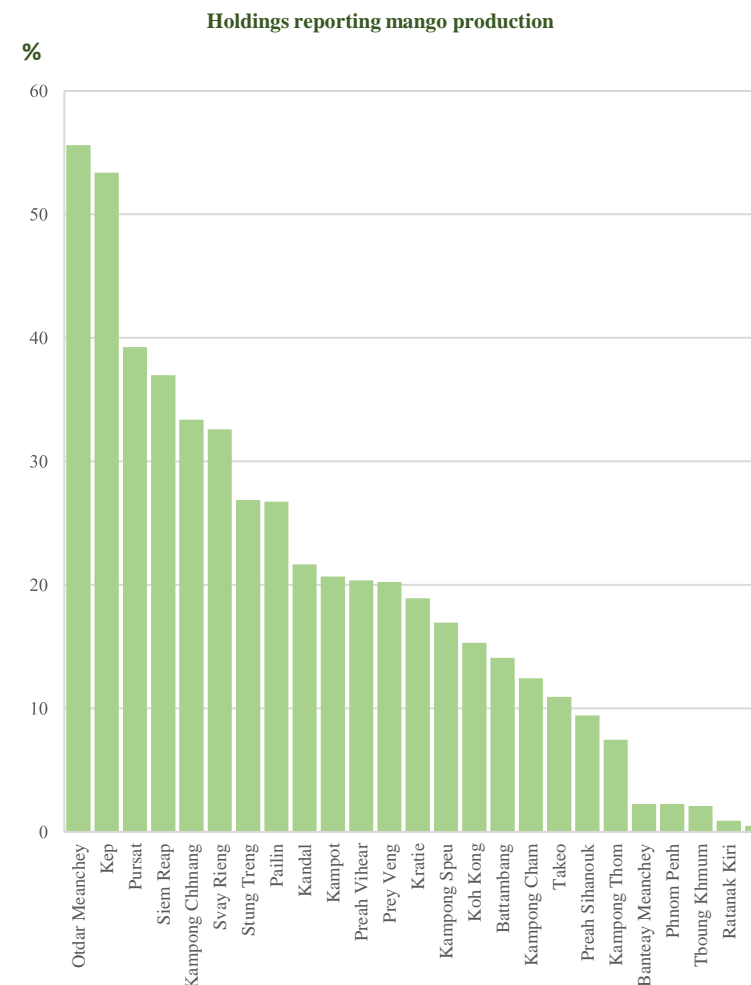National Institute of Statistics, MoP and MAFF

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Table 3.12: Holdings reporting mango production

Province code	Province name	Holdings reporting mango production	Holdings reporting mango production (%)
01	Banteay Meanchey	1,787	2.3
02	Battambang	14,638	14.1
03	Kampong Cham	14,572	12.4
04	Kampong Chhnang	26,929	33.4
05	Kampong Speu	23,218	17.0
06	Kampong Thom	8,902	7.5
07	Kampot	21,630	20.7
08	Kandal	23,085	21.7
09	Koh Kong	2,189	15.3
10	Kratie	8,054	18.9
11	Mondul Kiri	46	0.5
12	Phnom Penh	477	2.3
13	Preah Vihear	6,451	20.4
14	Prey Veng	28,042	20.2
15	Pursat	23,284	39.3
16	Ratanak Kiri	260	0.9
17	Siem Reap	46,644	37.0
18	Preah Sihanouk	1,040	9.4
19	Stung Treng	4,039	26.9
20	Svay Rieng	29,012	32.6
21	Takeo	15,527	10.9
22	Otdar Meanchey	20,091	55.6
23	Kep	2,667	53.4
24	Pailin	1,826	26.7
25	Tboung Khmum	2,159	2.1

Holdings reporting mango production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

4. Livestock Production

Map 4.1: Holdings reporting large livestock production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings reporting large livestock production : 42.8%
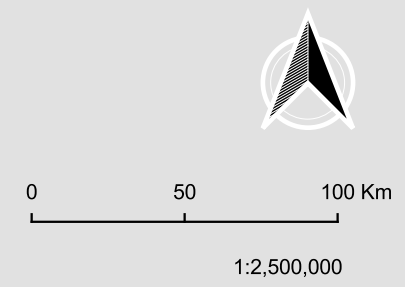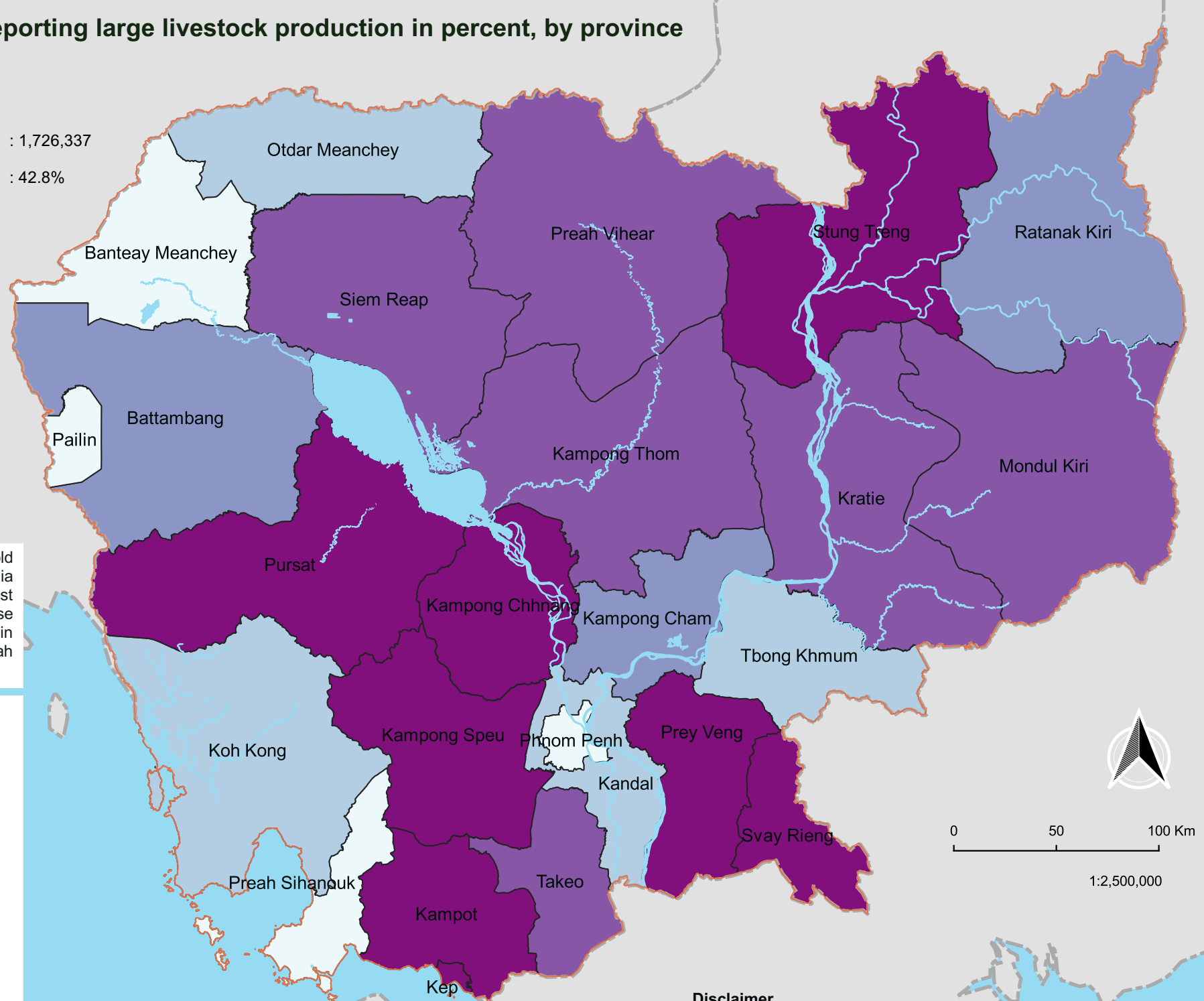
More than 40% of all household agricultural holdings in Cambodia raise some large livestock. Almost 3 in 4 holdings in Svay Rieng raise large livestock, while less than 1 in 5 holdings do so in Preah Sihanouk province.

Legend

Water

Holdings reporting large livestock production (%)

≤ 20.0

20.1 - 30.0

30.1 - 40.0

40.1 - 50.0

> 50.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Kampong Speu

Phnom Penh

Prey Veng

Koh Kong

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

0   50   100 Km

1:2,500,000

Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

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Table 4.1: Holdings reporting large livestock production

Province code	Province name	Holdings reporting raising large livestock (cow, buffalo, horse)	Holdings reporting raising large livestock (cow, buffalo, horse) (%)
01	Banteay Meanchey	14,938	18.9
02	Battambang	34,928	33.6
03	Kampong Cham	41,707	35.6
04	Kampong Chhnang	41,476	51.4
05	Kampong Speu	72,119	52.7
06	Kampong Thom	54,585	45.8
07	Kampot	59,278	56.7
08	Kandal	25,797	24.2
09	Koh Kong	4,128	28.9
10	Kratie	18,653	43.8
11	Mondul Kiri	3,864	41.5
12	Phnom Penh	4,007	19.0
13	Preah Vihear	15,676	49.5
14	Prey Veng	76,077	54.9
15	Pursat	54,585	55.7
16	Ratanak Kiri	10,374	36.7
17	Siem Reap	55,813	44.3
18	Preah Sihanouk	1,980	17.9
19	Stung Treng	7,967	53.0
20	Svay Rieng	65,919	73.7
21	Takeo	64,631	45.5
22	Otdar Meanchey	8,134	22.5
23	Kep	2,637	52.8
24	Pailin	1,231	18.0
25	Tboung Khmum	20,692	20.3
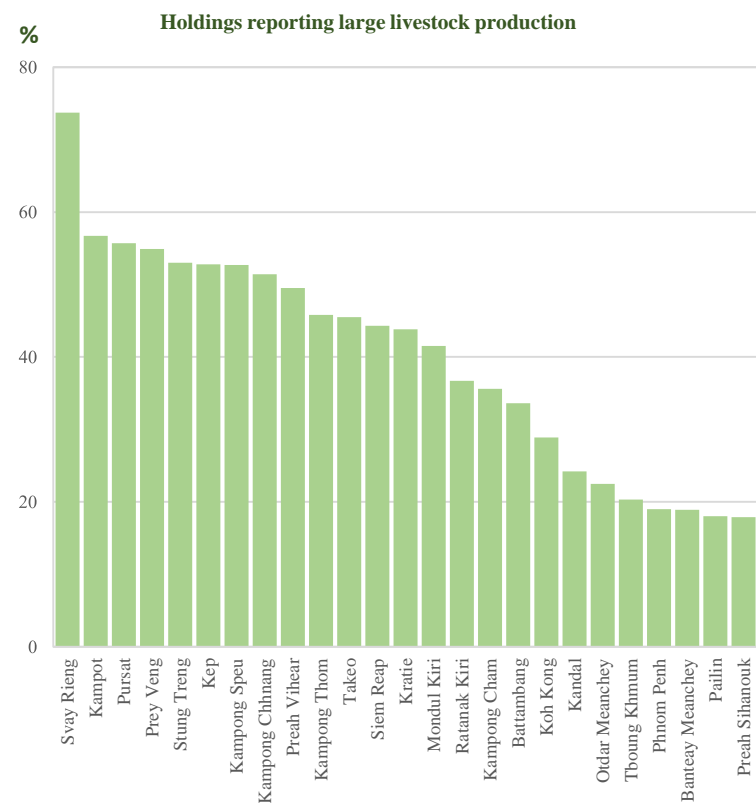
Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Holdings reporting large livestock production

Map 4.2: Holdings reporting small livestock production in percent, by province
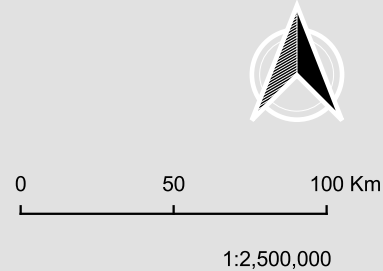
CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings reporting small livestock production : 7.9%

Less than 10% of Cambodian household agricultural holdings raise small livestock. This activity is more frequent in northern provinces, with 45.1% of the holdings raising small livestock in Ratanak Kiri. The lowest rate is found in Phnom Penh, with only 1.7% of the holdings raising pigs or goats.

Legend

Water

Holdings reporting small livestock production (%)

≤ 5.0
5.1 - 10.0
10.1 - 15.0
15.1 - 20.0
> 20.0
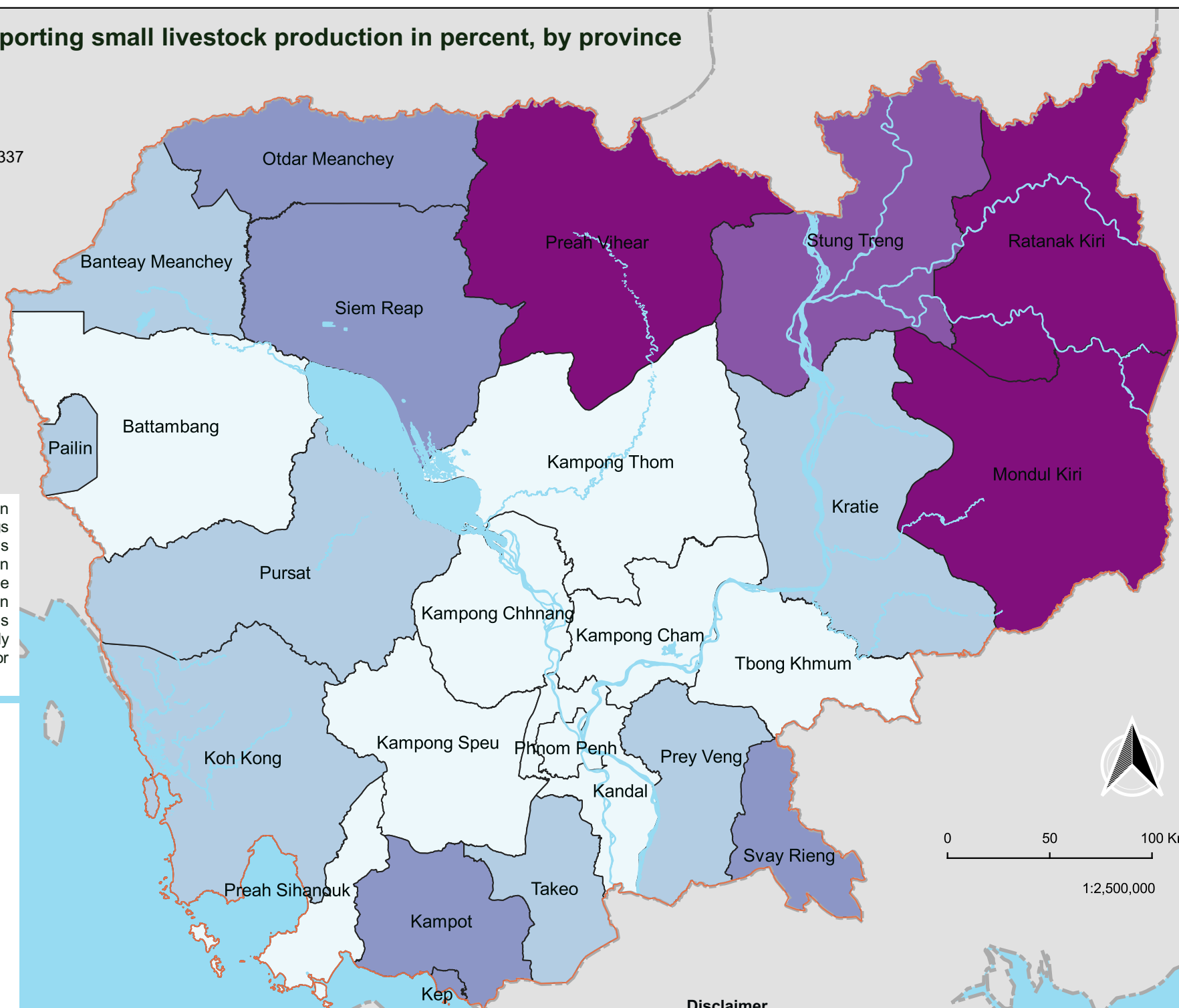
Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Pailin

Battambang

Kampong Thom

Kratie

Mondul Kiri

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Preah Sihanouk

Takeo

Svay Rieng

Kampot

Kep

0   50   100 Km

1:2,500,000

Disclaimer

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Table 4.2: Holdings reporting small livestock production

Province code	Province name	Holdings reporting raising small livestock (pig, goat)	Holdings reporting raising small livestock (pig, goat) (%)
01	Banteay Meanchey	4,238	5.4
02	Battambang	3,438	3.3
03	Kampong Cham	3,166	2.7
04	Kampong Chhnang	4,104	5.1
05	Kampong Speu	3,296	2.4
06	Kampong Thom	5,457	4.6
07	Kampot	11,944	11.4
08	Kandal	4,120	3.9
09	Koh Kong	1,399	9.8
10	Kratie	2,753	6.5
11	Mondul Kiri	2,340	25.1
12	Phnom Penh	353	1.7
13	Preah Vihear	11,736	37.1
14	Prey Veng	11,630	8.4
15	Pursat	4,465	7.5
16	Ratanak Kiri	12,747	45.1
17	Siem Reap	16,400	13.0
18	Preah Sihanouk	341	3.1
19	Stung Treng	2,719	18.1
20	Svay Rieng	12,960	14.6
21	Takeo	7,750	5.5
22	Otdar Meanchey	4,091	11.3
23	Kep	505	10.1
24	Pailin	398	5.8
25	Tboung Khmum	3,141	3.1
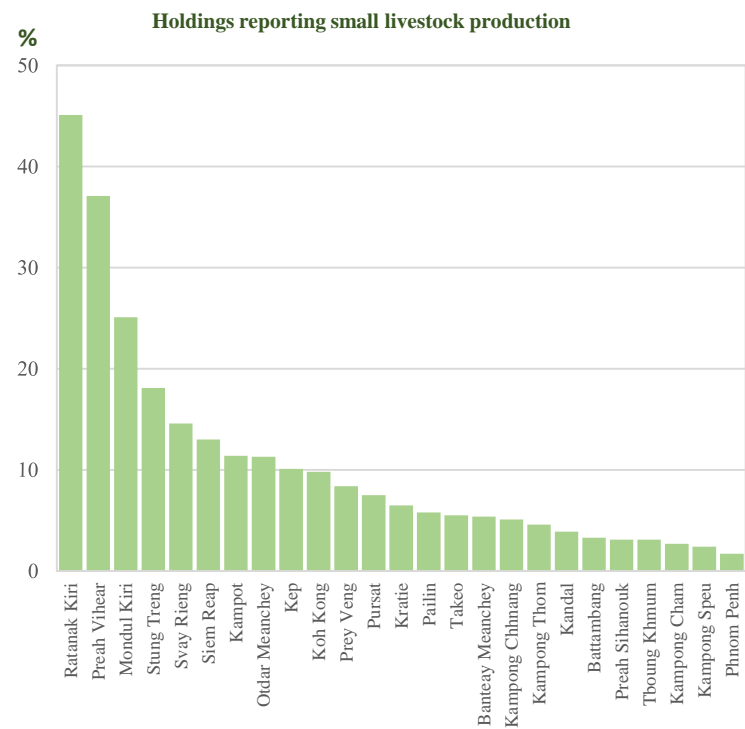
Holdings reporting small livestock production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 4.3: Holdings reporting poultry production in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
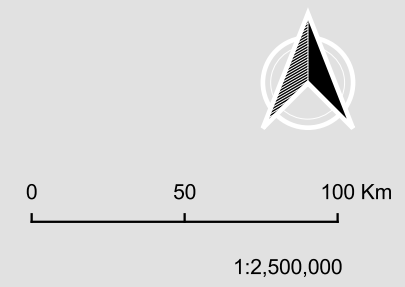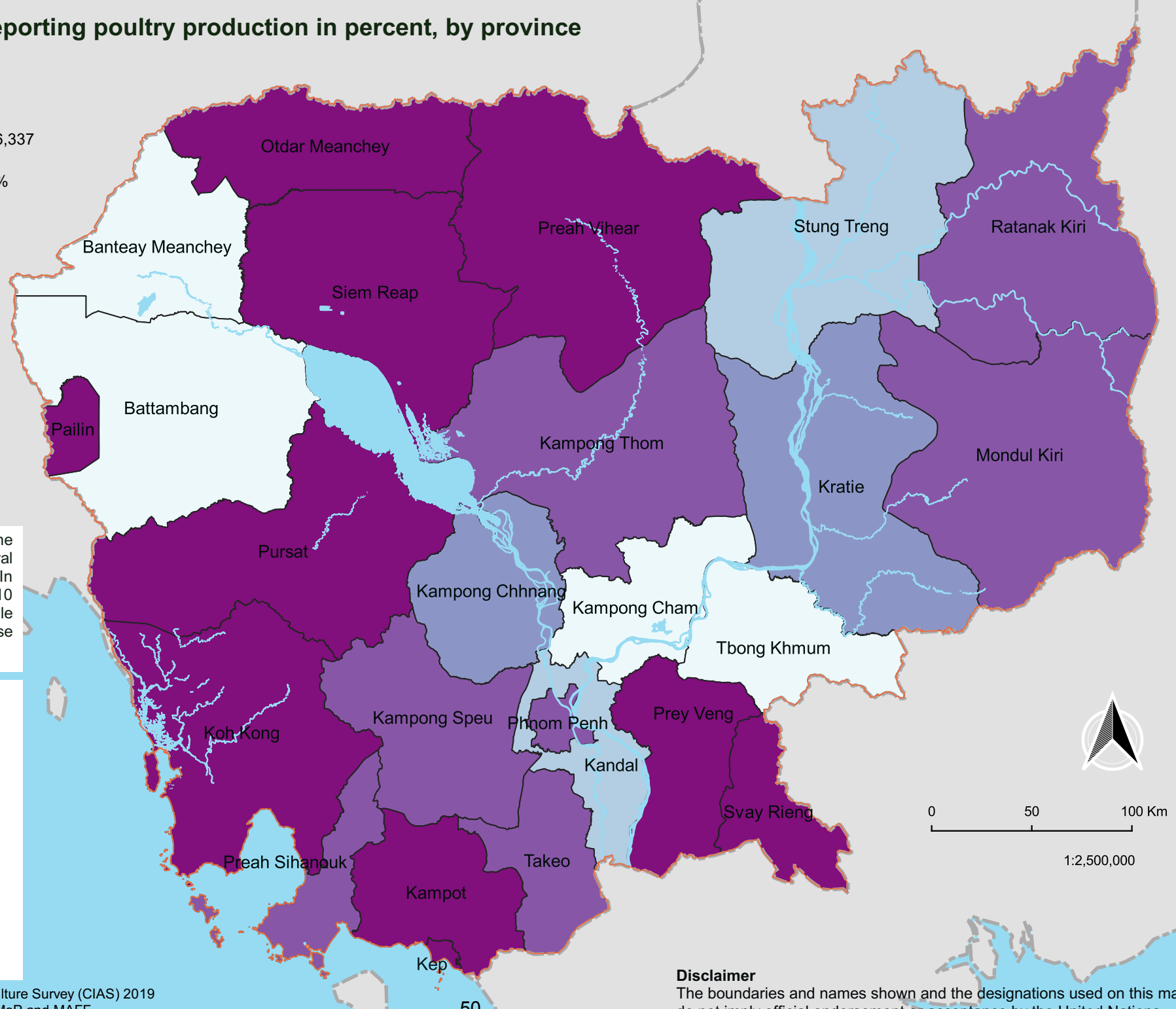reporting poultry : 62.6%
production

Almost two thirds of the Cambodian household agricultural holdings raise some poultry. In Kampot province, almost 9 in 10 holdings have such activity, while only 30.2% of the holdings raise poultry in Battambang province.

Legend

Water

Holdings reporting poultry production (%)

≤ 40.0

40.1 - 50.0

50.1 - 65.0

65.1 - 75.0

> 75.0

Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Pailin

Battambang

Kampong Thom

Kratie

Mondul Kiri

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep
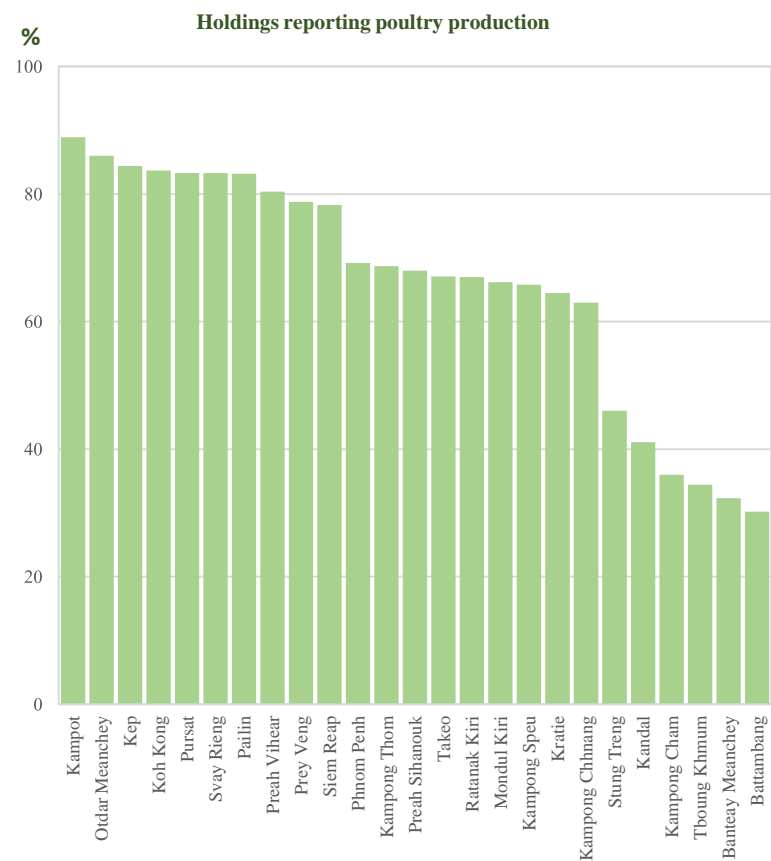
0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Disclaimer
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Table 4.3: Holdings reporting poultry production[i]

Province code	Province name	Holdings reporting poultry	Holdings reporting poultry (%)
01	Banteay Meanchey	25,463	32.3
02	Battambang	1,338	30.2
03	Kampong Cham	42,119	36.0
04	Kampong Chhnang	50,863	63.0
05	Kampong Speu	90,106	65.8
06	Kampong Thom	81,864	68.7
07	Kampot	92,960	88.9
08	Kandal	43,745	41.1
09	Koh Kong	11,958	83.7
10	Kratie	27,450	64.5
11	Mondul Kiri	6,171	66.2
12	Phnom Penh	14,570	69.2
13	Preah Vihear	25,443	80.4
14	Prey Veng	109,135	78.8
15	Pursat	49,413	83.3
16	Ratanak Kiri	18,929	67.0
17	Siem Reap	98,800	78.3
18	Preah Sihanouk	7,500	68.0
19	Stung Treng	6,919	46.0
20	Svay Rieng	74,117	83.3
21	Takeo	95,247	67.1
22	Otdar Meanchey	31,071	86.0
23	Kep	4,218	84.4
24	Pailin	5,684	83.2
25	Tboung Khmum	35,138	34.4

Holdings reporting poultry production

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

[i] Poultry includes: chickens, natural chickens, ducks, natural ducks, quails, swallows, turkeys, geese.

5. Aquaculture and Capture Fishing

Map 5.1: Holdings reporting aquaculture activity in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings : 3.0%
engaged in aquaculture

Aquaculture is logically concentrated in the Tonle Sap Lake area in Cambodia. However, Svay Rieng and Prey Veng are the provinces with the highest rates of holdings engaged in aquaculture (respectively 15.5% and 9.3%). Only 0.1% of the holdings reported such activity in Kampong Speu and Koh Kong provinces.

Legend

- Water

Holdings reporting aquaculture activity (%)

- ≤ 1.0
- 1.1 - 2.0
- 2.1 - 3.0
- 3.1 - 4.0
- > 4.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Kratie

Mondul Kiri

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Kampot

Takeo

Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
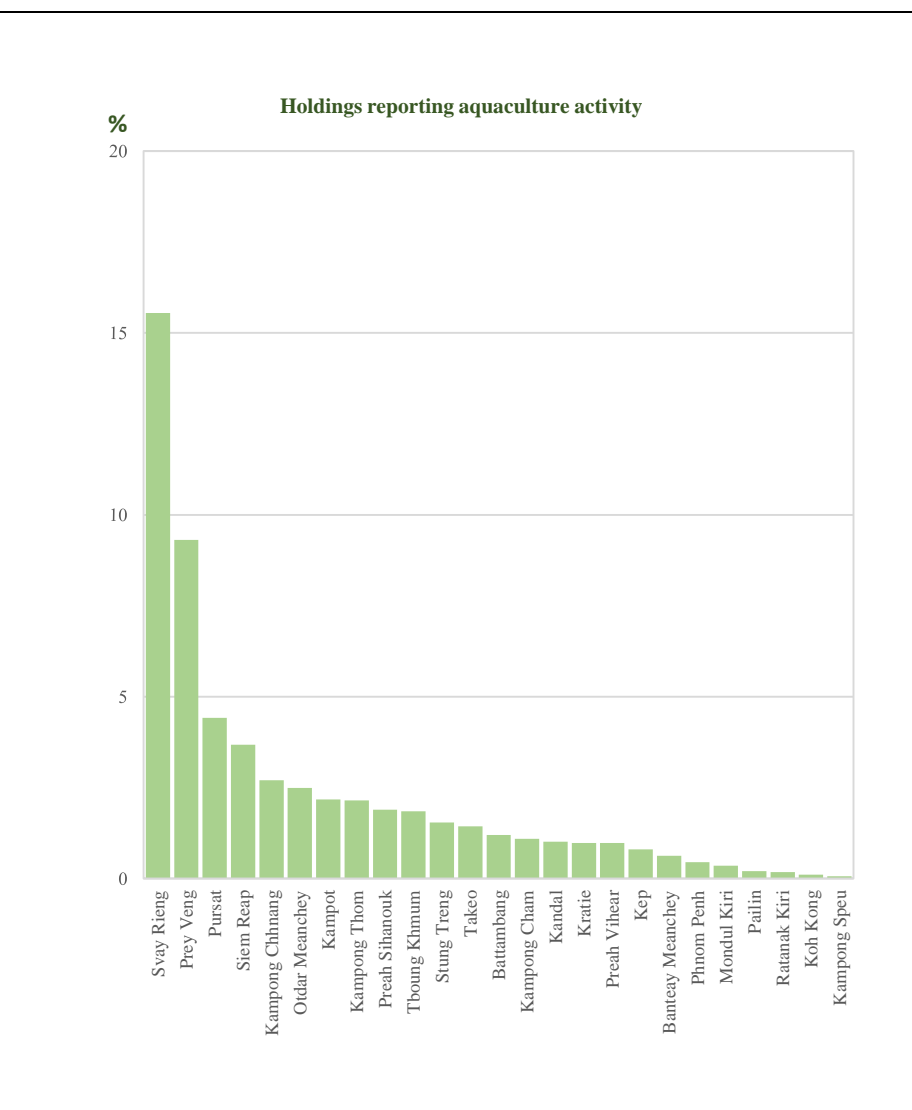National Institute of Statistics, MoP and MAFF
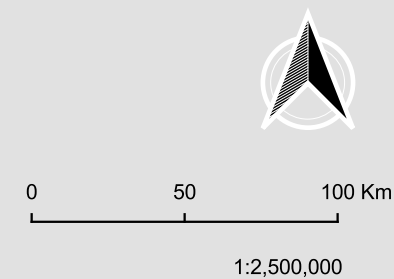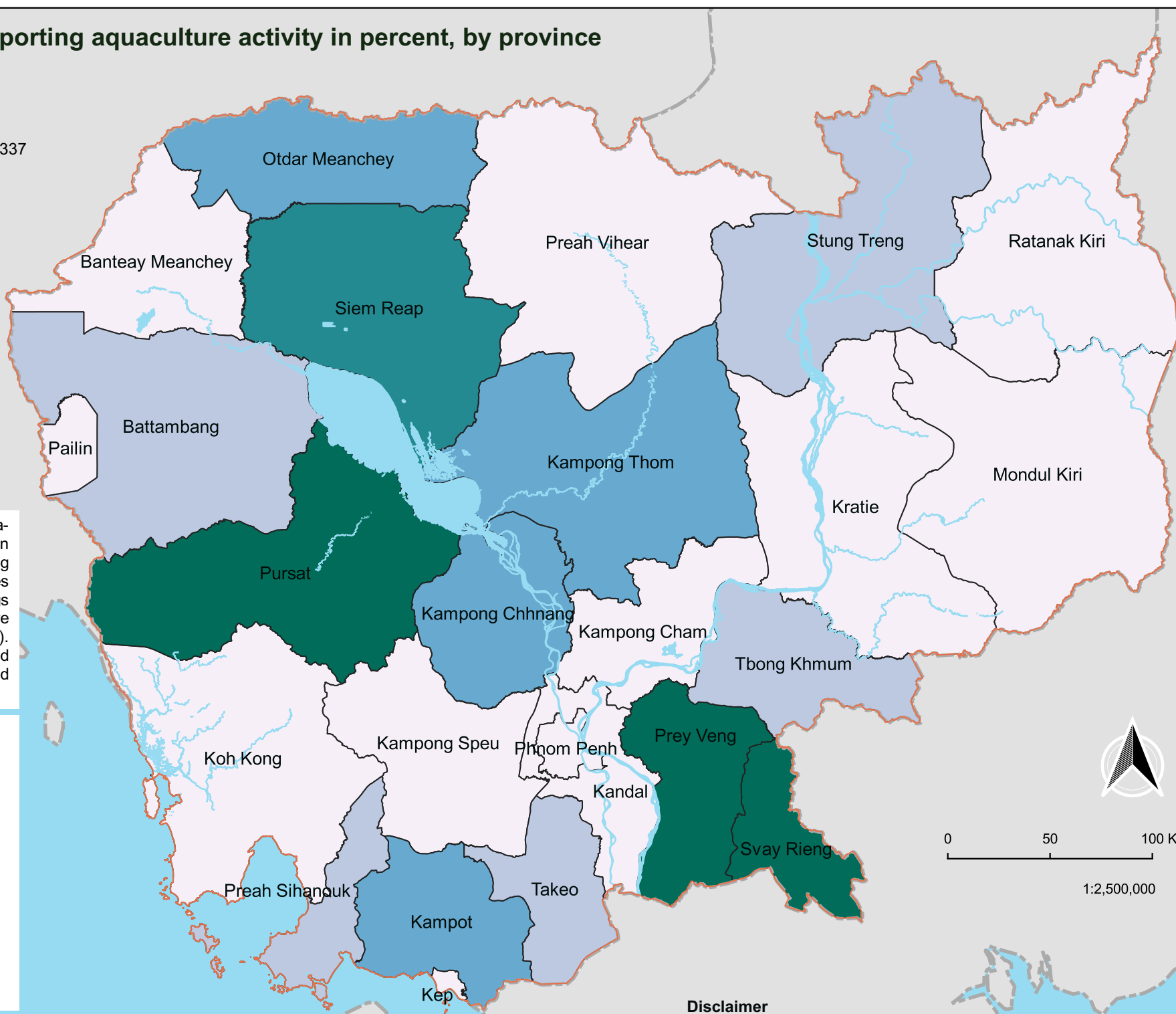
Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Table 5.1: Holdings reporting aquaculture activity

Province code	Province name	Holdings reporting aquaculture activity	Holdings reporting aquaculture activity (%)
01	Banteay Meanchey	498	0.6
02	Battambang	1,246	1.2
03	Kampong Cham	1,285	1.1
04	Kampong Chhnang	2,186	2.7
05	Kampong Speu	88	0.1
06	Kampong Thom	2,567	2.2
07	Kampot	2,281	2.2
08	Kandal	1,083	1.0
09	Koh Kong	16	0.1
10	Kratie	418	1.0
11	Mondul Kiri	33	0.4
12	Phnom Penh	95	0.5
13	Preah Vihear	310	1.0
14	Prey Veng	12,901	9.3
15	Pursat	2,620	4.4
16	Ratanak Kiri	50	0.2
17	Siem Reap	4,644	3.7
18	Preah Sihanouk	209	1.9
19	Stung Treng	232	1.5
20	Svay Rieng	13,840	15.5
21	Takeo	2,045	1.4
22	Otdar Meanchey	901	2.5
23	Kep	40	0.8
24	Pailin	14	0.2
25	Tboung Khmum	1,893	1.9

Holdings reporting aquaculture activity

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 5.2: Holdings reporting capture fishing activity in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
engaged in capture : 13.6%
fishing

13.6% of the Cambodian house-hold agricultural holdings reported they engaged in capture fishing activities, almost uniformly distributed across the different provinces. 42.9% of the holdings in Otdar Meanchey reported such activity, while none of the sampled holdings reported capture fishing in Mondul Kiri.

Legend

Water

Holdings reporting capture fishing activity (%)

≤ 3.0

3.1 - 6.0

6.1 - 9.0

9.1 - 12.0

> 12.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

| 0 | 50 | 100 Km |

1:2,500,000

Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF
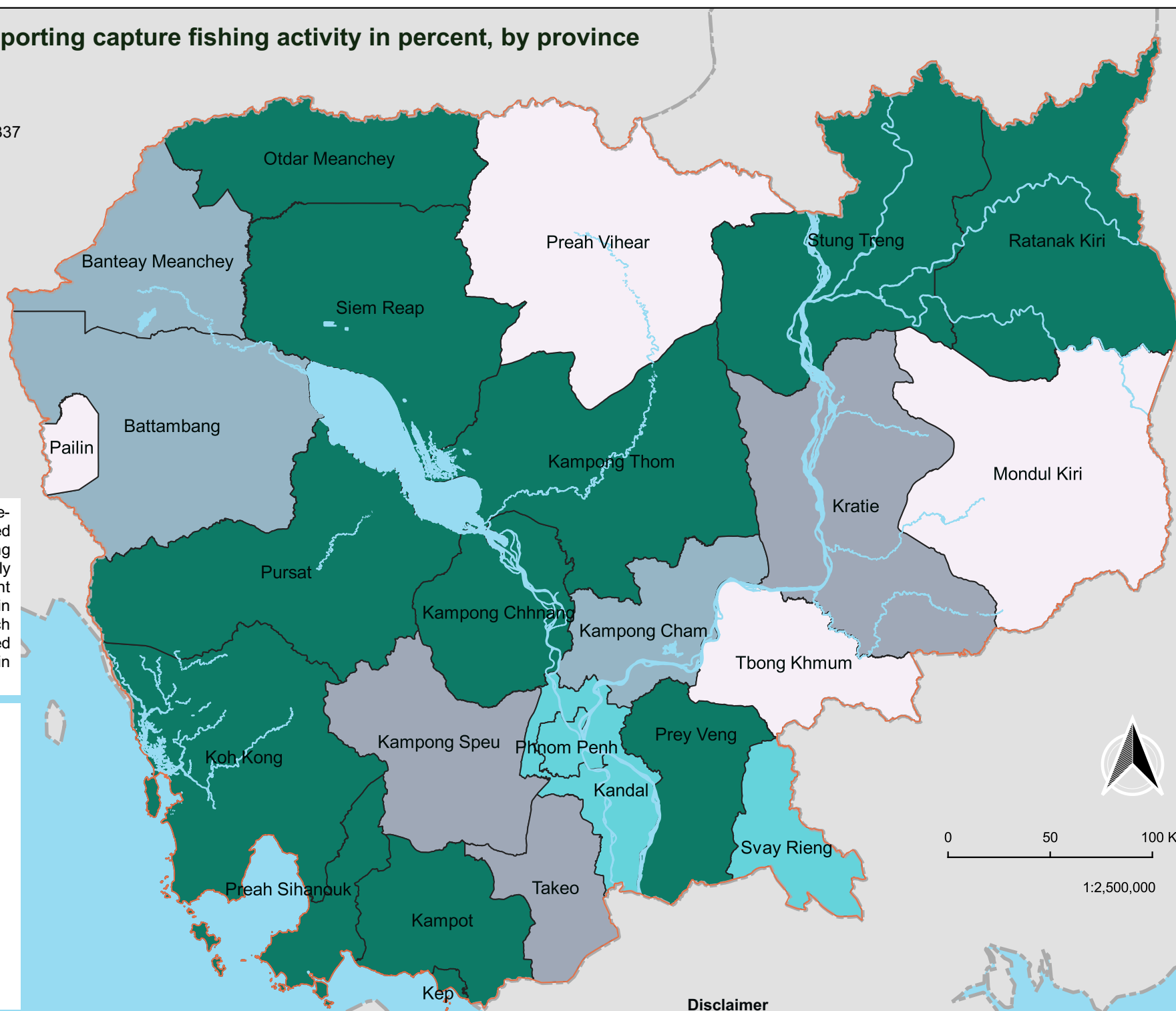
Table 5.2: Holdings reporting capture fishing activity

Province code	Province name	Holdings reporting capture fishing activity	Holdings reporting capture fishing activity (%)
01	Banteay Meanchey	6,071	7.7
02	Battambang	6,852	6.6
03	Kampong Cham	7,999	6.8
04	Kampong Chhnang	11,096	13.8
05	Kampong Speu	4,525	3.3
06	Kampong Thom	28,055	23.5
07	Kampot	25,279	24.2
08	Kandal	12,543	11.8
09	Koh Kong	2,357	16.5
10	Kratie	2,569	6.0
11	Mondul Kiri	0	0.0
12	Phnom Penh	2,050	9.7
13	Preah Vihear	88	0.3
14	Prey Veng	35,989	26.0
15	Pursat	21,688	36.6
16	Ratanak Kiri	5,464	19.3
17	Siem Reap	21,893	17.4
18	Preah Sihanouk	1,619	14.7
19	Stung Treng	3,269	21.8
20	Svay Rieng	8,152	9.2
21	Takeo	7,247	5.1
22	Otdar Meanchey	15,508	42.9
23	Kep	1,006	20.1
24	Pailin	49	0.7
25	Tboung Khmum	3,022	3.0
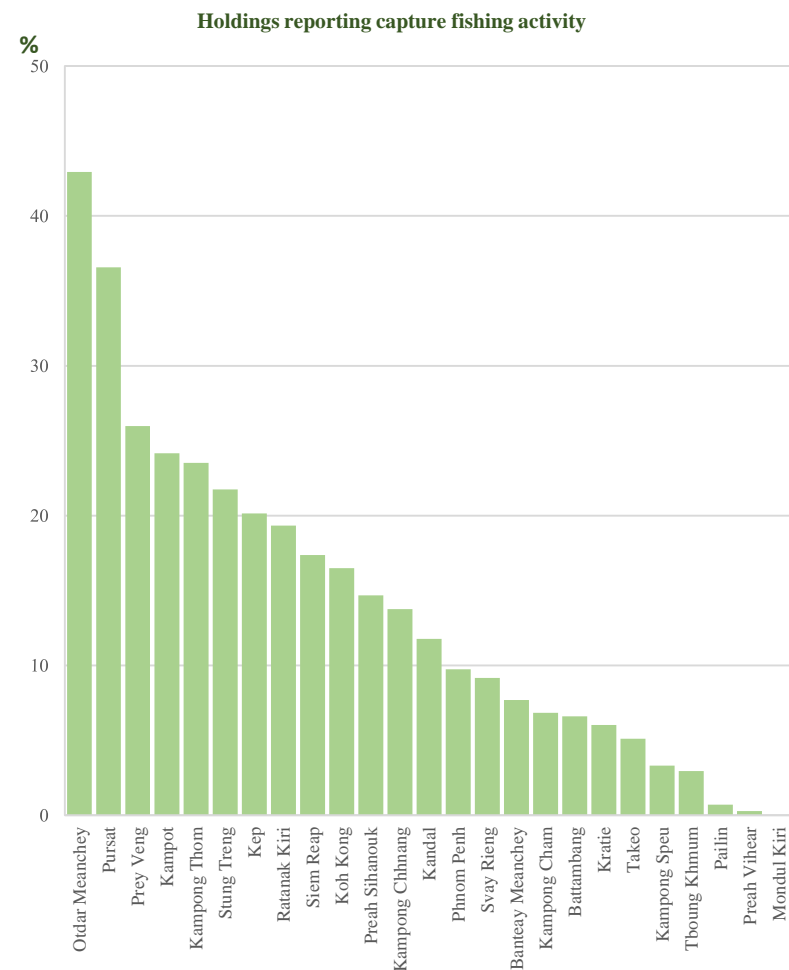
Holdings reporting capture fishing activity

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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6. Main Intended Destination of Agricultural Production

Map 6.1: Holdings reporting agricultural production as mainly for home consumption in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

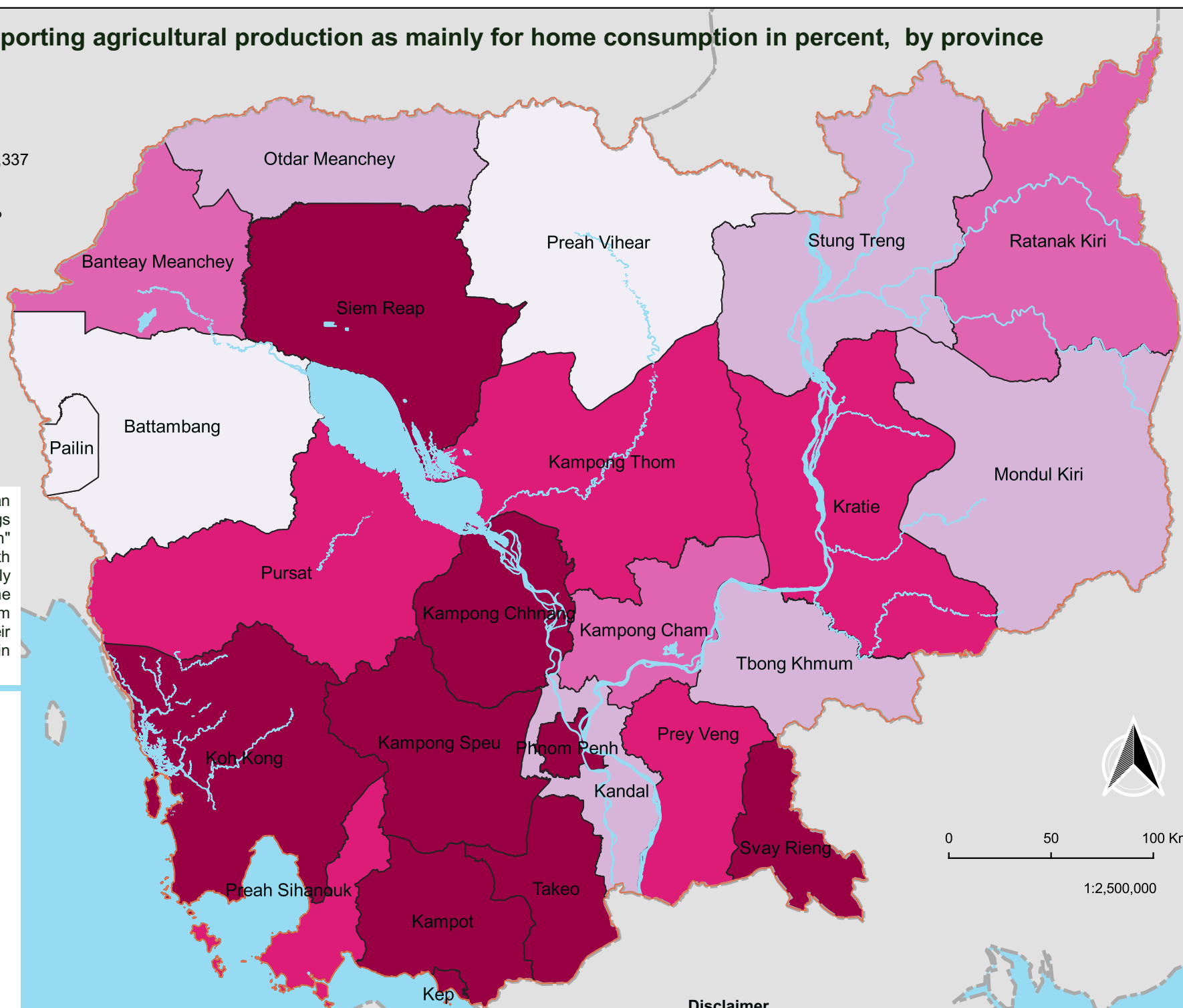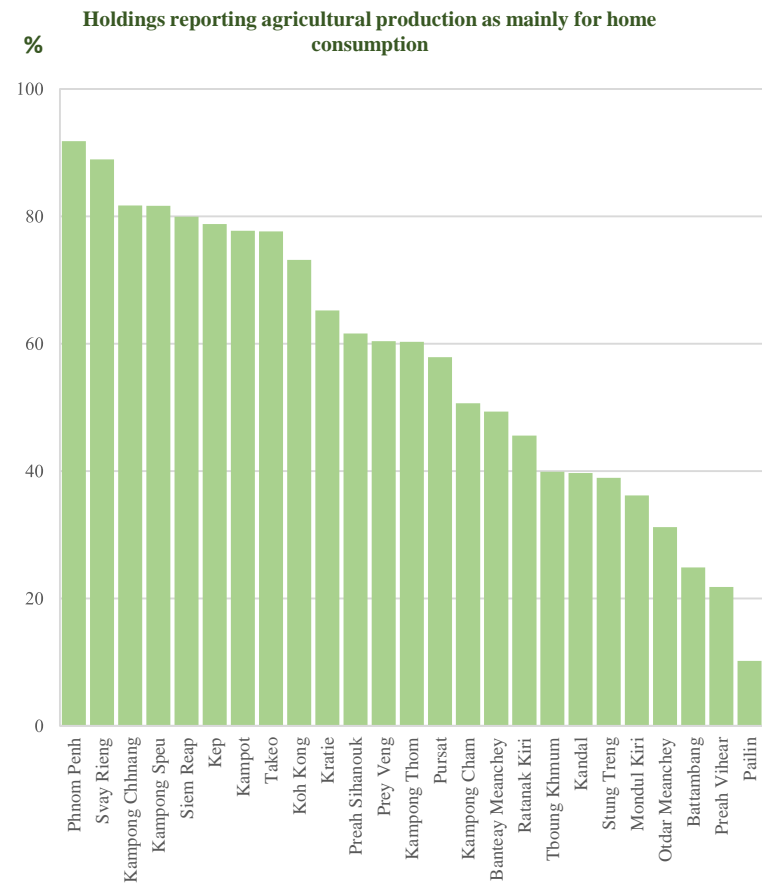Percentage of holdings conducting agriculture activity mainly for home consumption : 61.1%

More than 60% of the Cambodian household agricultural holdings have a "self-consumption" production focus. Provinces with the highest rates are mostly located in the south part of the country, with 91.8% of the Phnom Penh holdings producing for their own-consumption, and 88.9% in Svay Rieng province.

Legend

Water

Holdings reporting agricultural production as mainly for home consumption (%)

- ≤ 25.0
- 25.1 - 40.0
- 40.1 - 55.0
- 55.1 - 70-.0
- > 70.0

Otdar Meanchey

Banteay Meanchey

Siem Reap

Preah Vihear

Stung Treng

Ratanak Kiri

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Preah Sihanouk

Takeo

Svay Rieng

Kampot

Kep

| 0 | 50 | 100 Km |

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

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Table 6.1: Holdings reporting agricultural production as mainly for home consumption

Province code	Province name	Holdings reporting agricultural production as mainly for home consumption	Holdings reporting agricultural production as mainly for home consumption (%)
01	Banteay Meanchey	38,913	49.4
02	Battambang	25,839	24.9
03	Kampong Cham	59,298	50.6
04	Kampong Chhnang	65,940	81.7
05	Kampong Speu	111,812	81.6
06	Kampong Thom	71,884	60.3
07	Kampot	81,305	77.7
08	Kandal	42,283	39.7
09	Koh Kong	10,453	73.2
10	Kratie	27,766	65.2
11	Mondul Kiri	3,368	36.2
12	Phnom Penh	19,341	91.8
13	Preah Vihear	6,909	21.8
14	Prey Veng	83,658	60.4
15	Pursat	34,329	57.9
16	Ratanak Kiri	12,871	45.5
17	Siem Reap	100,794	79.9
18	Preah Sihanouk	6,793	61.6
19	Stung Treng	5,850	38.9
20	Svay Rieng	79,189	88.9
21	Takeo	110,229	77.6
22	Otdar Meanchey	11,262	31.2
23	Kep	3,936	78.8
24	Pailin	695	10.2
25	Tboung Khmum	40,790	39.9

Holdings reporting agricultural production as mainly for home consumption

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 6.2: Holdings reporting agricultural production as mainly for sale in percent, by province
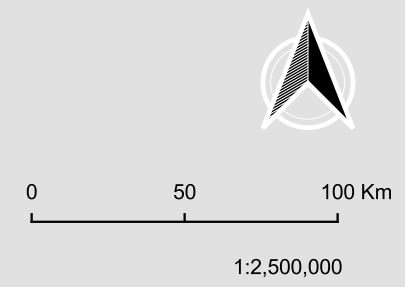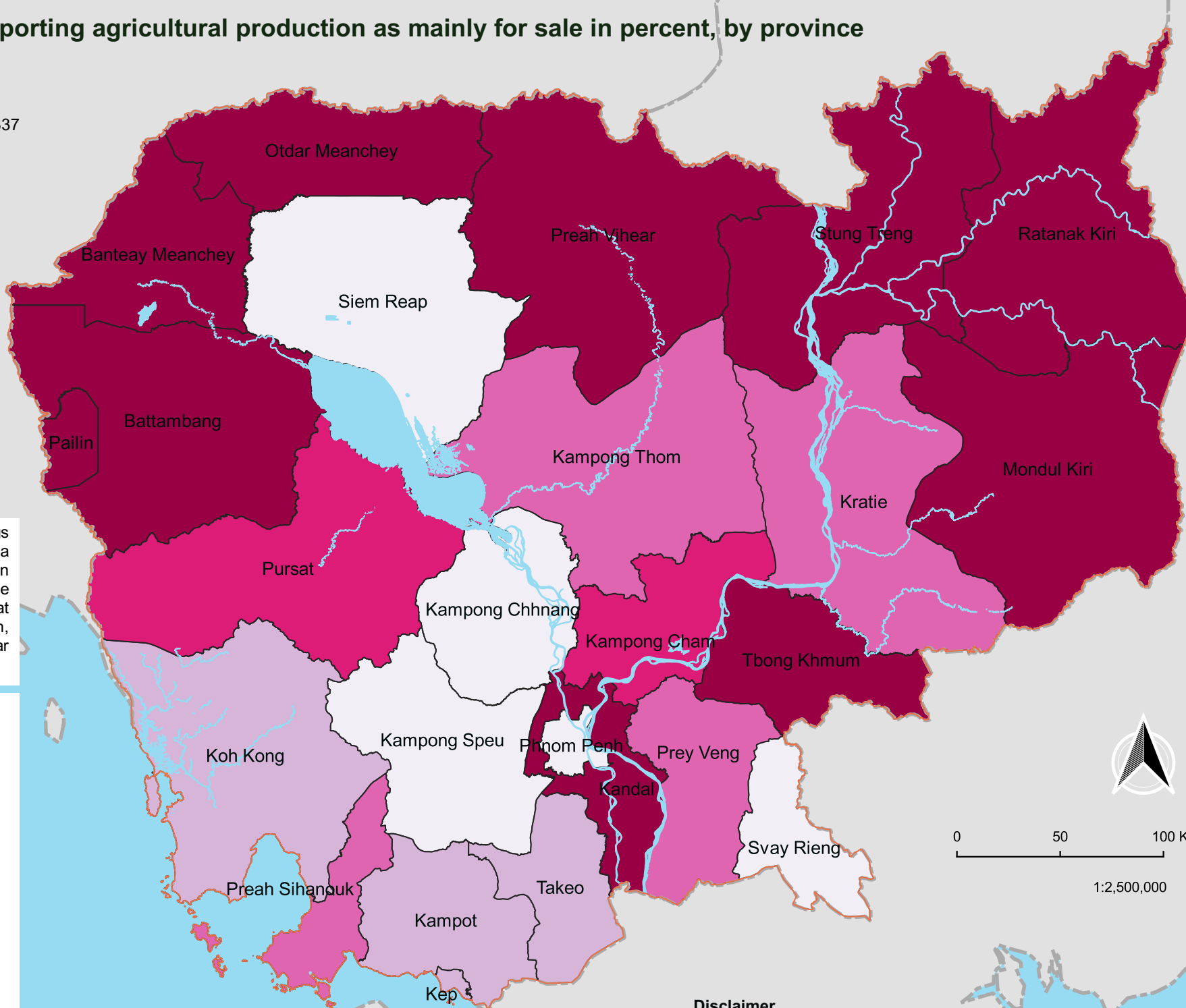
CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings
conducting agriculture : 38.9%
activity mainly for sale

Logically and as per the findings from map 6.1, holdings with a "sale" focus are mostly located in the north part of Cambodia. Close to nine in ten holdings aim at selling their production in Pailin, and 78.2% in Preah Vihear province.

Legend

	Water

Holdings reporting agricultural
production as mainly for sale (%)

	≤ 20.0
	20.1 - 30.0
	30.1 - 40.0
	40.1 - 50.0
	> 50.0

Otdar Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Banteay Meanchey

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Kampong Speu

Phnom Penh

Prey Veng

Koh Kong

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

0   50   100 Km

1:2,500,000

Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Table 6.2: Holdings reporting agricultural production as mainly for sale

Province code	Province name	Holdings reporting agricultural production as mainly for sale	Holdings reporting agricultural production as mainly for sale (%)
01	Banteay Meanchey	39,930	50.6
02	Battambang	77,991	75.1
03	Kampong Cham	57,827	49.4
04	Kampong Chhnang	14,753	18.3
05	Kampong Speu	25,141	18.4
06	Kampong Thom	47,357	39.7
07	Kampot	23,314	22.3
08	Kandal	64,266	60.3
09	Koh Kong	3,834	26.8
10	Kratie	14,819	34.8
11	Mondul Kiri	5,947	63.8
12	Phnom Penh	1,723	8.2
13	Preah Vihear	24,756	78.2
14	Prey Veng	54,890	39.6
15	Pursat	24,981	42.1
16	Ratanak Kiri	15,386	54.4
17	Siem Reap	25,309	20.1
18	Preah Sihanouk	4,237	38.4
19	Stung Treng	9,179	61.1
20	Svay Rieng	9,840	11.1
21	Takeo	31,778	22.4
22	Otdar Meanchey	24,861	68.8
23	Kep	1,060	21.2
24	Pailin	6,135	89.8
25	Tboung Khmum	61,292	59.9
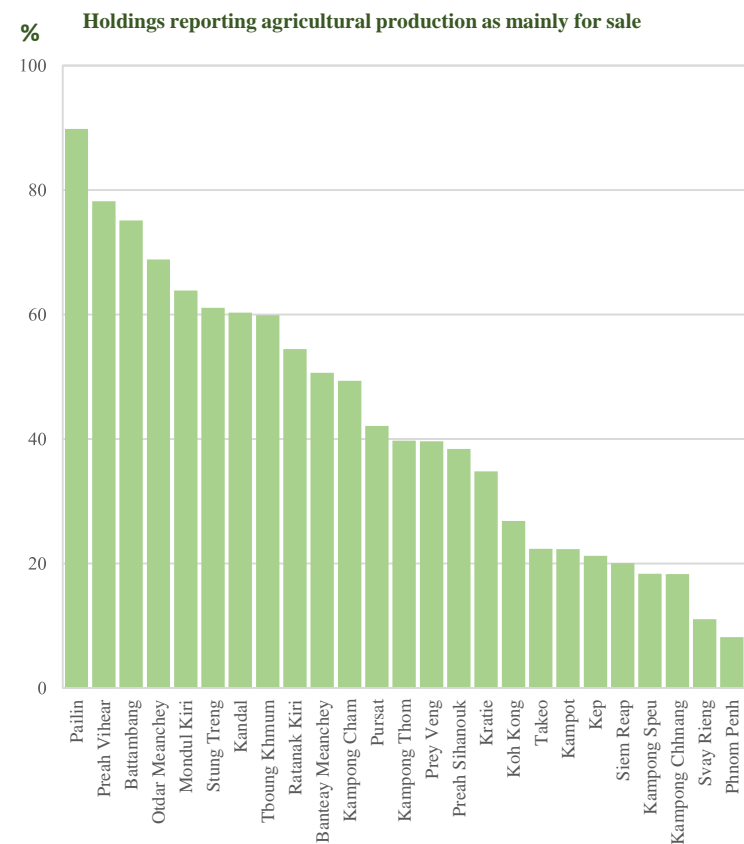
Holdings reporting agricultural production as mainly for sale

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

7. Socio - Economics

Map 7.1: Holdings reporting "Work for other holdings using the production means of this holding" in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings working for other holdings using their own production means : 3.3%

Based on the survey sample, 11.5% of Cambodian household agricultural holdings are engaged in at least one other activity. Less than 5% are working for other holdings, using their own means of production. Rates are higher in the coastal zone and some of the plateau provinces, with 23.3% of the holdings engaged in such activity in Otdar Meanchey province.

Legend

Water

Holdings reporting "work for other holdings using the production means (equipment) of this holding" (%)

- ≤ 1.0
- 1.1 - 2.0
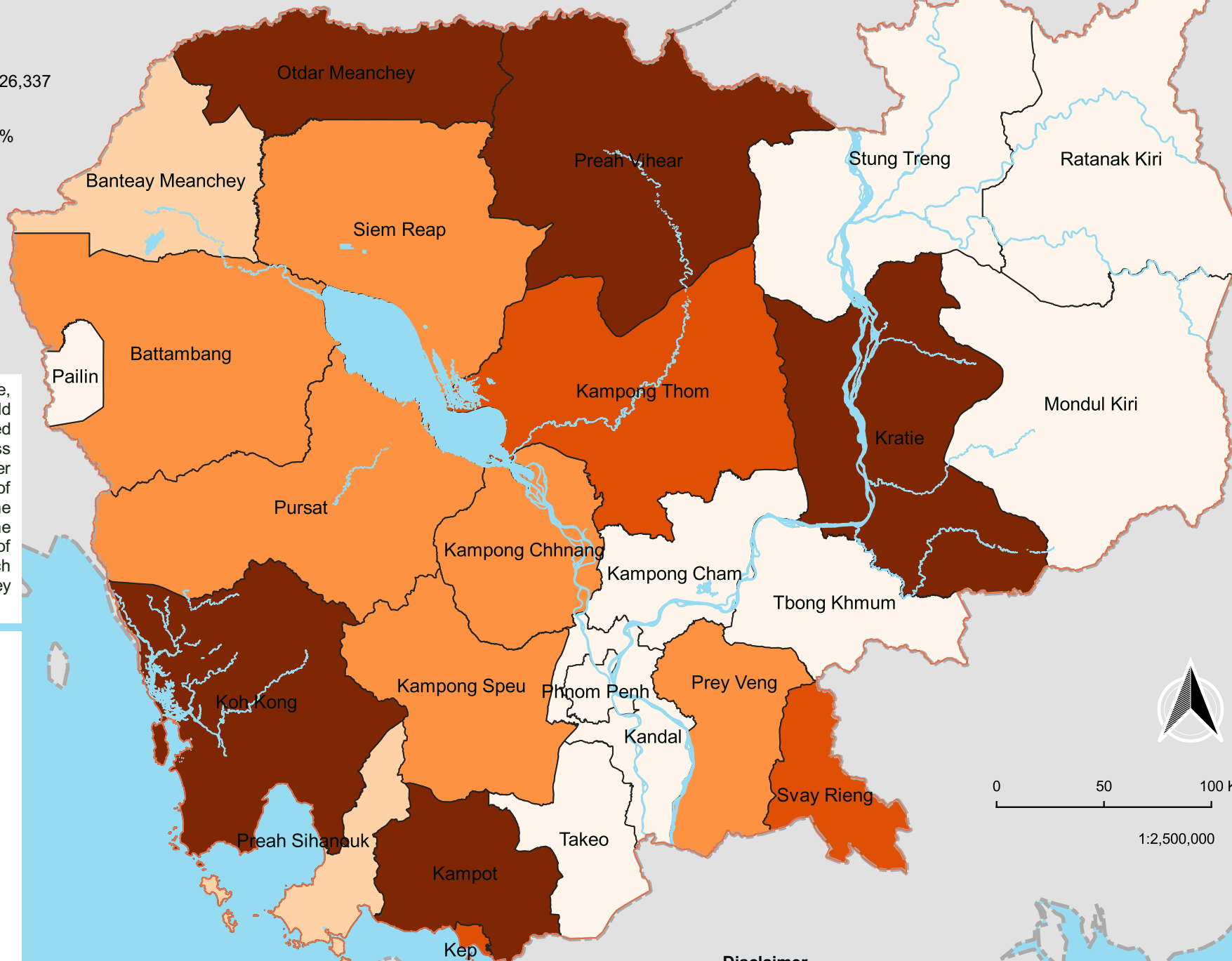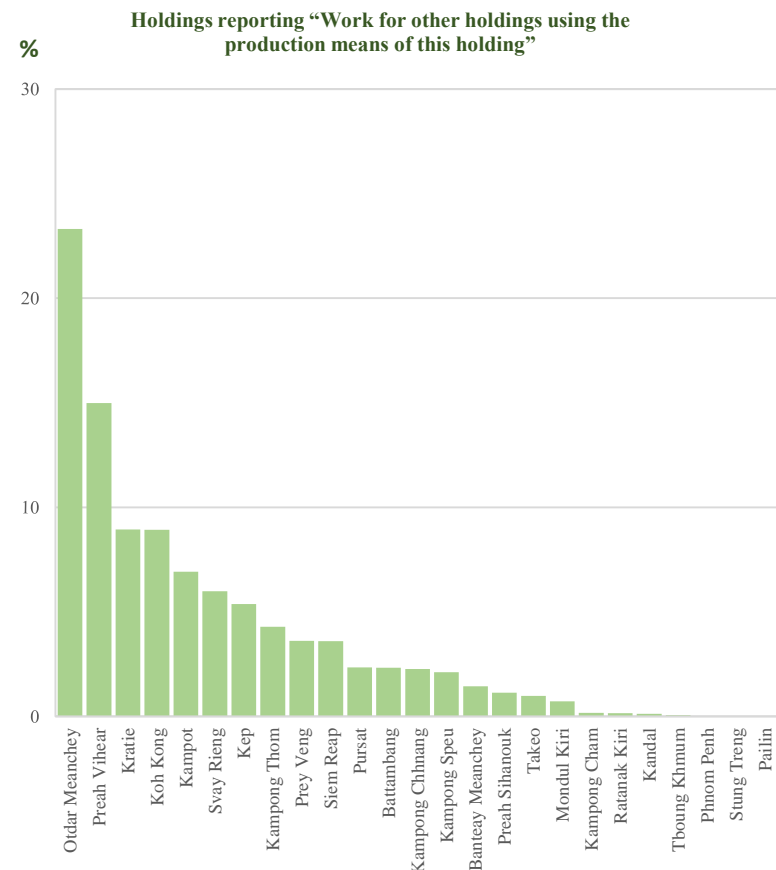- 2.1 - 4.0
- 4.1 - 6.0
- > 6.0

Otdar Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Banteay Meanchey

Siem Reap

Battambang

Pailin

Kampong Thom

Kratie

Mondul Kiri

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Kampot

Takeo

Kep

0   50   100 Km

1:2,500,000
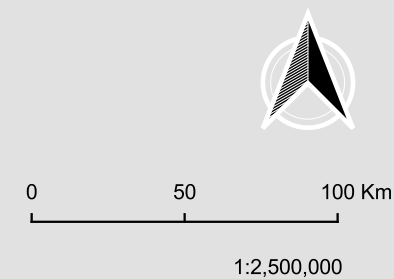
Disclaimer
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Table 7.1: Holdings reporting "Work for other holdings using the production means of this holding"

Province code	Province name	Holdings reporting "Work for other holdings using the production means of this holding"	Holdings reporting "Work for other holdings using the production means of this holding" (%)
01	Banteay Meanchey	1,135	1.4
02	Battambang	2,413	2.3
03	Kampong Cham	202	0.2
04	Kampong Chhnang	1,825	2.3
05	Kampong Speu	2,892	2.1
06	Kampong Thom	5,107	4.3
07	Kampot	7,242	6.9
08	Kandal	134	0.1
09	Koh Kong	1,275	8.9
10	Kratie	3,804	8.9
11	Mondul Kiri	67	0.7
12	Phnom Penh	0	0.0
13	Preah Vihear	4,743	15.0
14	Prey Veng	5,018	3.6
15	Pursat	1,393	2.3
16	Ratanak Kiri	43	0.2
17	Siem Reap	4,538	3.6
18	Preah Sihanouk	126	1.1
19	Stung Treng	0	0.0
20	Svay Rieng	5,329	6.0
21	Takeo	1,397	1.0
22	Otdar Meanchey	8,420	23.3
23	Kep	268	5.4
24	Pailin	0	0.0
25	Tboung Khmum	71	0.1

Holdings reporting "Work for other holdings using the production means of this holding"

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 7.2: Holdings reporting "Rice milling" in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings reporting rice milling activity : 2.5%

Based on the survey sample, 11.5% of Cambodian household agricultural holdings are engaged in at least one other activity. Less than 5% are milling rice. Rates are higher in the coastal zone and some of the plateau provinces, with 10.3% of the holdings engaged in such activity in Koh Kong province.

Legend

- Water

Holdings reporting "Rice milling" (%)

- ≤ 1.0
- 1.1 - 2.0
- 2.1 - 3.0
- 3.1 - 4.0
- > 4.0
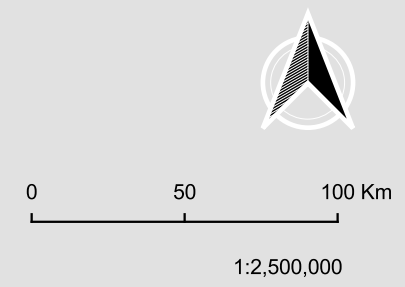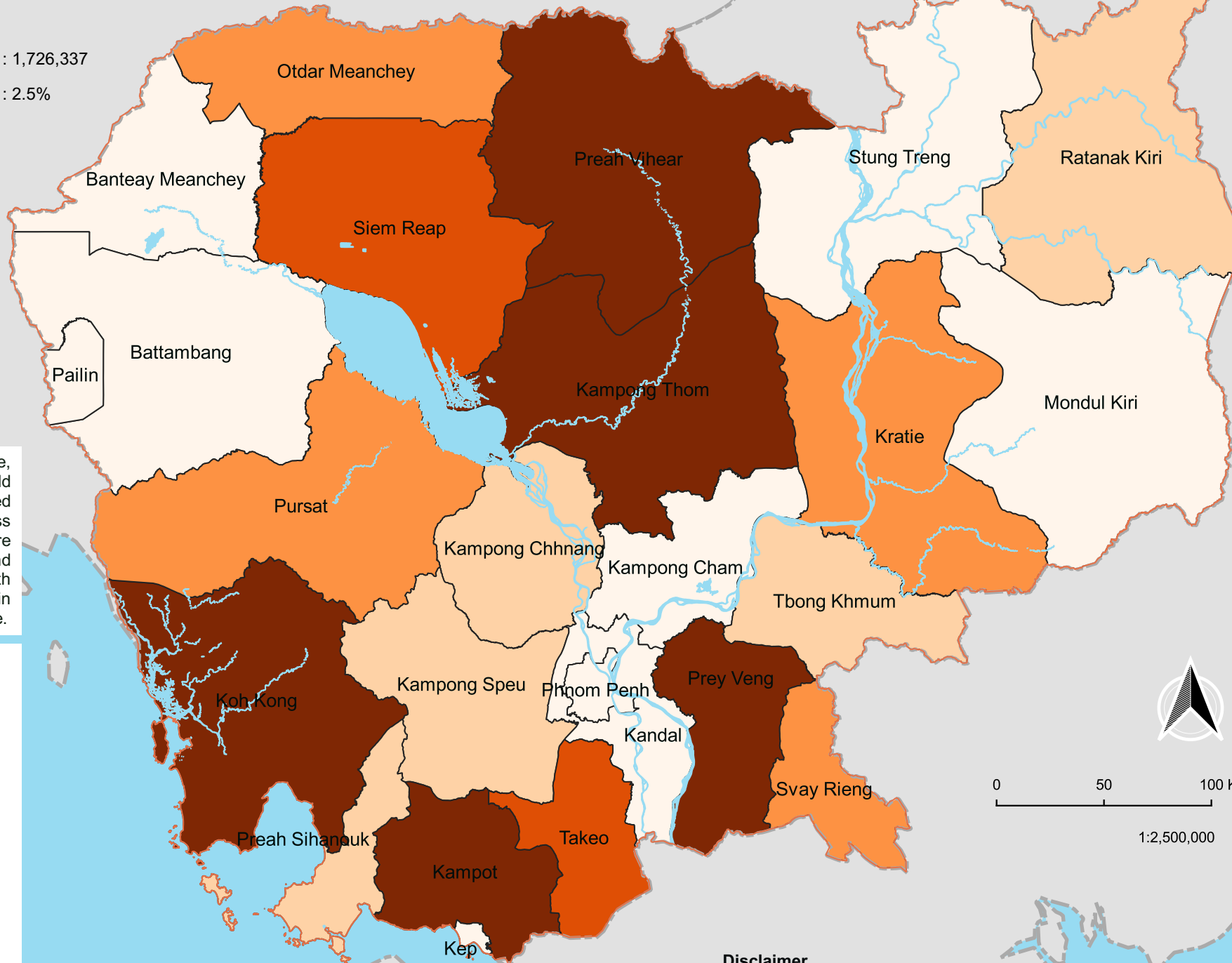
Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Preah Sihanouk

Takeo

Kampot

Kep

0   50   100 Km

1:2,500,000

Disclaimer

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Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Table 7.2: Holdings reporting "Rice milling"

Province code	Province name	Holdings reporting "Rice milling"	Holdings reporting "Rice milling" (%)
01	Banteay Meanchey	599	0.8
02	Battambang	709	0.7
03	Kampong Cham	797	0.7
04	Kampong Chhnang	1,229	1.5
05	Kampong Speu	1,947	1.4
06	Kampong Thom	5,118	4.3
07	Kampot	4,337	4.1
08	Kandal	346	0.3
09	Koh Kong	1,469	10.3
10	Kratie	876	2.1
11	Mondul Kiri	49	0.5
12	Phnom Penh	0	0.0
13	Preah Vihear	2,926	9.2
14	Prey Veng	6,917	5.0
15	Pursat	1,545	2.6
16	Ratanak Kiri	503	1.8
17	Siem Reap	4,147	3.3
18	Preah Sihanouk	136	1.2
19	Stung Treng	115	0.8
20	Svay Rieng	2,552	2.9
21	Takeo	4,578	3.2
22	Otdar Meanchey	903	2.5
23	Kep	41	0.8
24	Pailin	0	0.0
25	Tboung Khmum	1,228	1.2
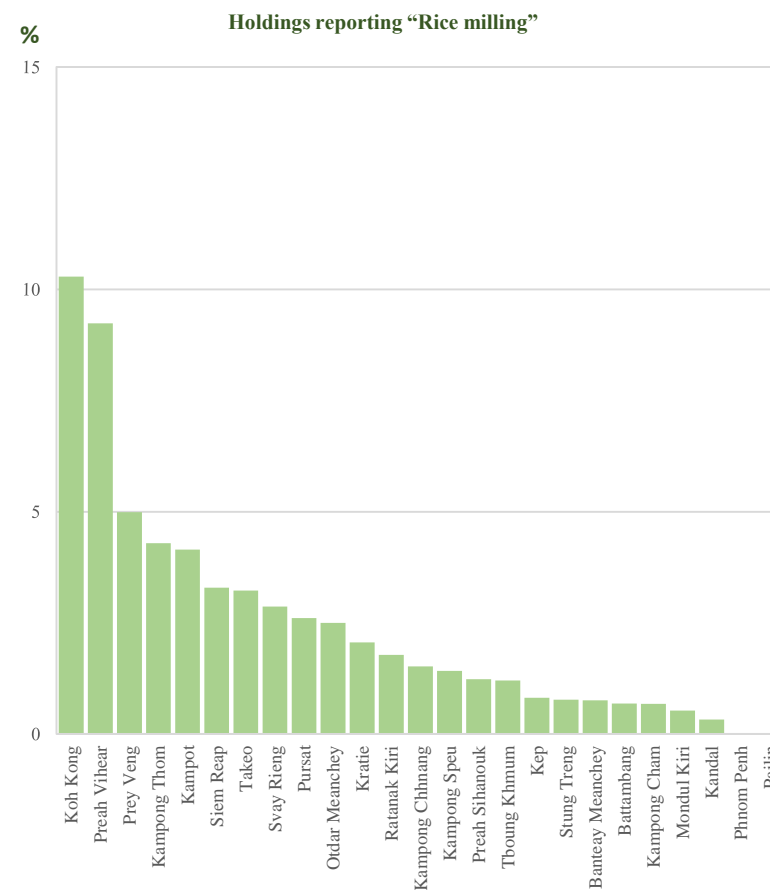
Holdings reporting "Rice milling"

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 7.3: Holdings reporting at least one severe shock in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of holdings reporting at least one : 34.3 % severe shock

The plateau zone province of Ratanak Kiri has the highest percentage of holdings reporting at least one severe shock during the reference period (83.9%), closely followed by Otdar Meanchey province (80.8%).

Legend

Water

Holdings reporting at least one severe shock (%)

- ≤ 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- > 50.0

Otdar Meanchey

Banteay Meanchey

Preah Vihear

Stung Treng

Ratanak Kiri

Siem Reap

Pailin

Battambang

Kampong Thom

Mondul Kiri

Kratie

Pursat

Kampong Chhnang

Kampong Cham

Tbong Khmum

Koh Kong

Kampong Speu

Phnom Penh

Prey Veng

Kandal

Svay Rieng

Takeo

Preah Sihanouk

Kampot

Kep

0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF
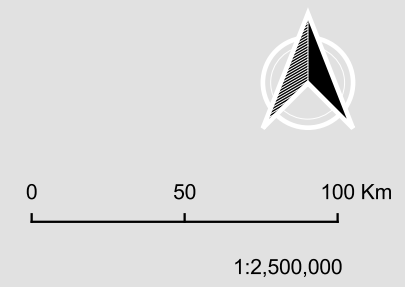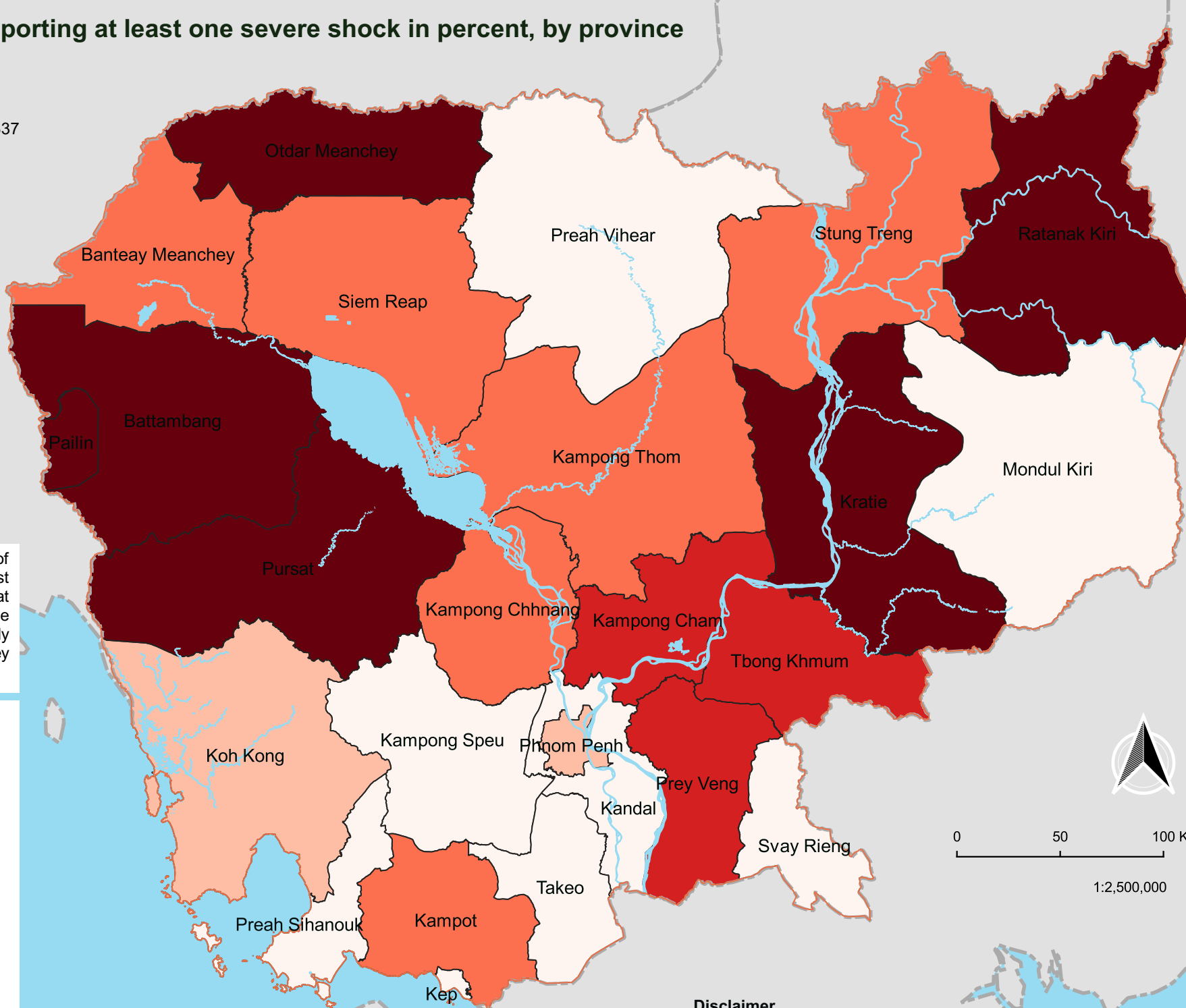
Disclaimer
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Table 7.3: Holdings reporting at least one severe shock

Province code	Province name	Holdings reporting at least one severe shock	Holdings reporting at least one severe shock (%)
01	Banteay Meanchey	25,482	32.3
02	Battambang	62,082	59.8
03	Kampong Cham	47,936	40.9
04	Kampong Chhnang	24,877	30.8
05	Kampong Speu	19,873	14.5
06	Kampong Thom	46,338	38.9
07	Kampot	32,238	30.8
08	Kandal	16,482	15.5
09	Koh Kong	3,191	22.3
10	Kratie	22,246	52.2
11	Mondul Kiri	1,628	17.5
12	Phnom Penh	4,755	22.6
13	Preah Vihear	5,181	16.4
14	Prey Veng	60,707	43.8
15	Pursat	35,484	59.8
16	Ratanak Kiri	23,713	83.9
17	Siem Reap	49,068	38.9
18	Preah Sihanouk	1,369	12.4
19	Stung Treng	5,151	34.3
20	Svay Rieng	11,903	13.4
21	Takeo	16,792	11.8
22	Otdar Meanchey	29,194	80.8
23	Kep	546	10.9
24	Pailin	3,457	50.6
25	Tboung Khmum	42,028	41.1
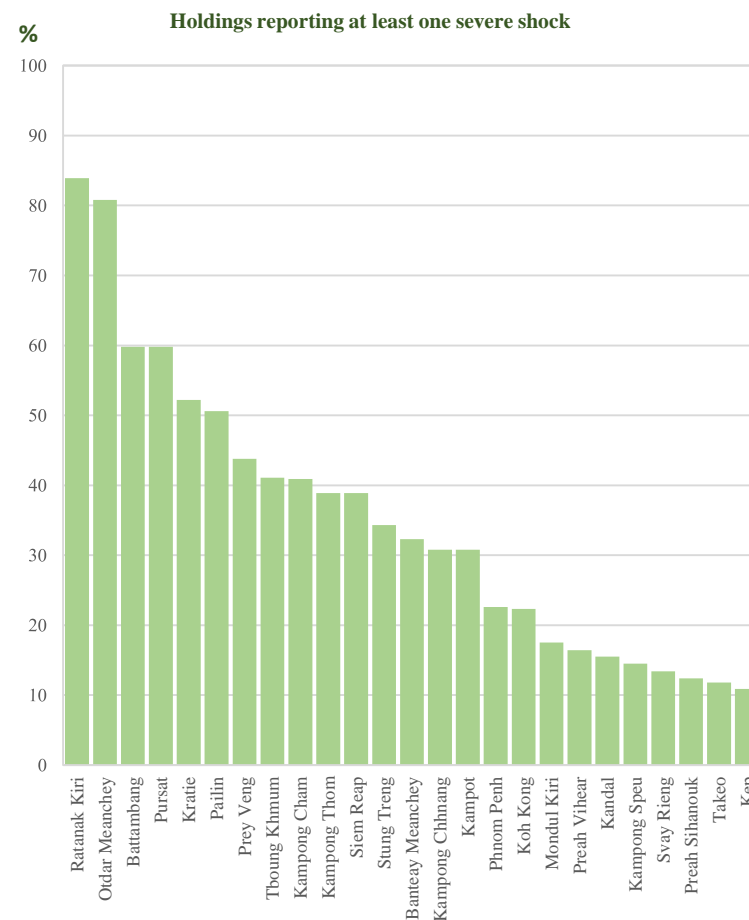
Holdings reporting at least one severe shock

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

Map 7.4: Holdings reporting shocks as more severe than in the past in percent, by province

CAMBODIA:

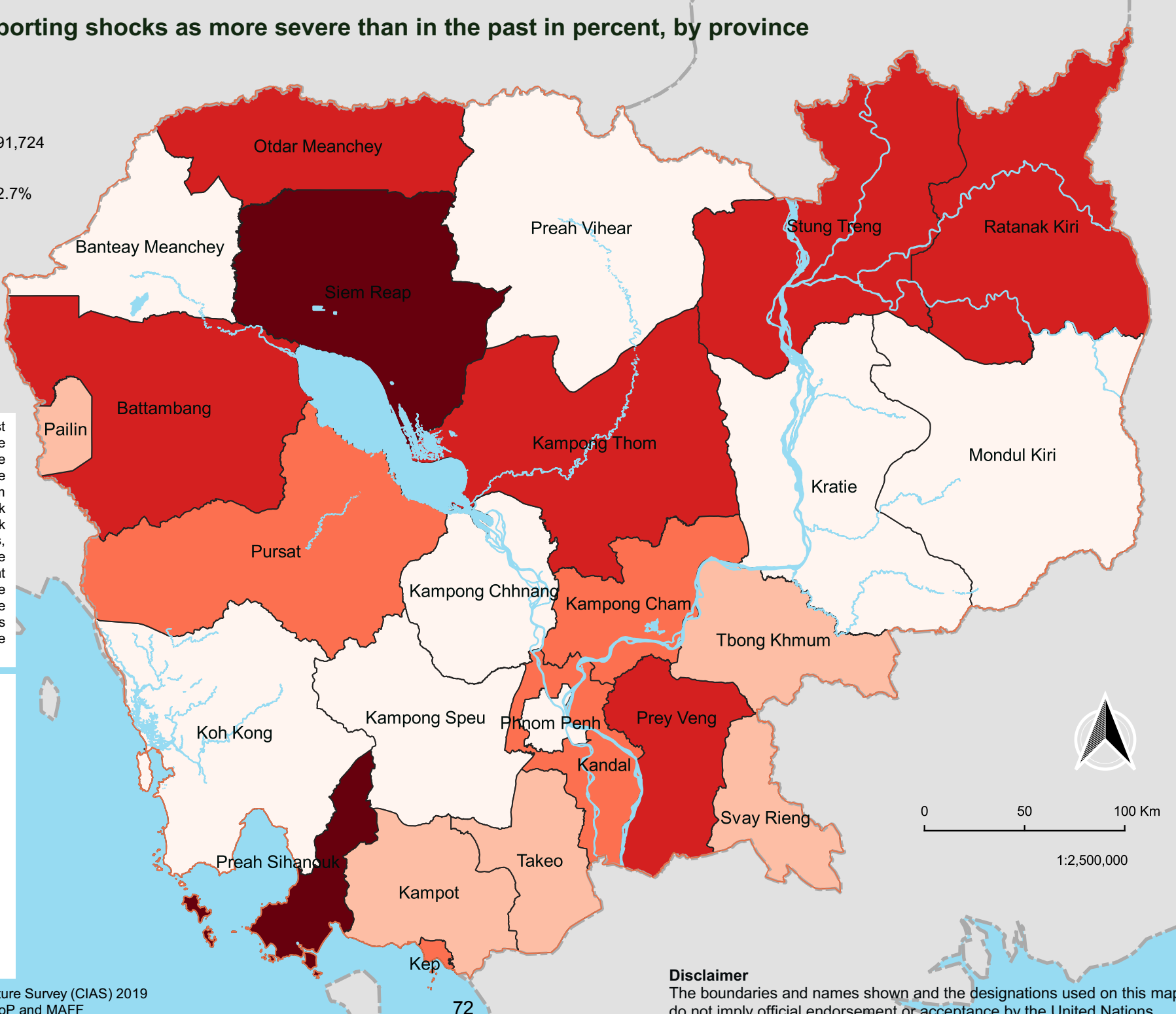Number of holdings reporting at least one severe shock : 591,724

Percentage of holdings reporting shock as more severe than in the past : 42.7%

Among the holdings reporting at least one severe shock in the reference period, more than 40% reported the shock was more severe than in the past. This rate was the highest in Siem Reap (62.7%) and Preah Sihanouk provinces (65.2%). Note that Ratanak Kiri and Otdar Meanchey provinces, which were the two provinces with the highest rates of holdings reporting at least one severe shock (map 7.3), are also among the provinces with the highest percentages of holdings reporting more severe shock than in the past here.

Legend

Water

Holdings reporting shocks as more severe than in the past (%)

- ≤ 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- > 60.0

Otdar Meanchey
Preah Vihear
Banteay Meanchey
Siem Reap
Stung Treng
Ratanak Kiri
Battambang
Pailin
Kampong Thom
Mondul Kiri
Kratie
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Svay Rieng
Preah Sihanouk
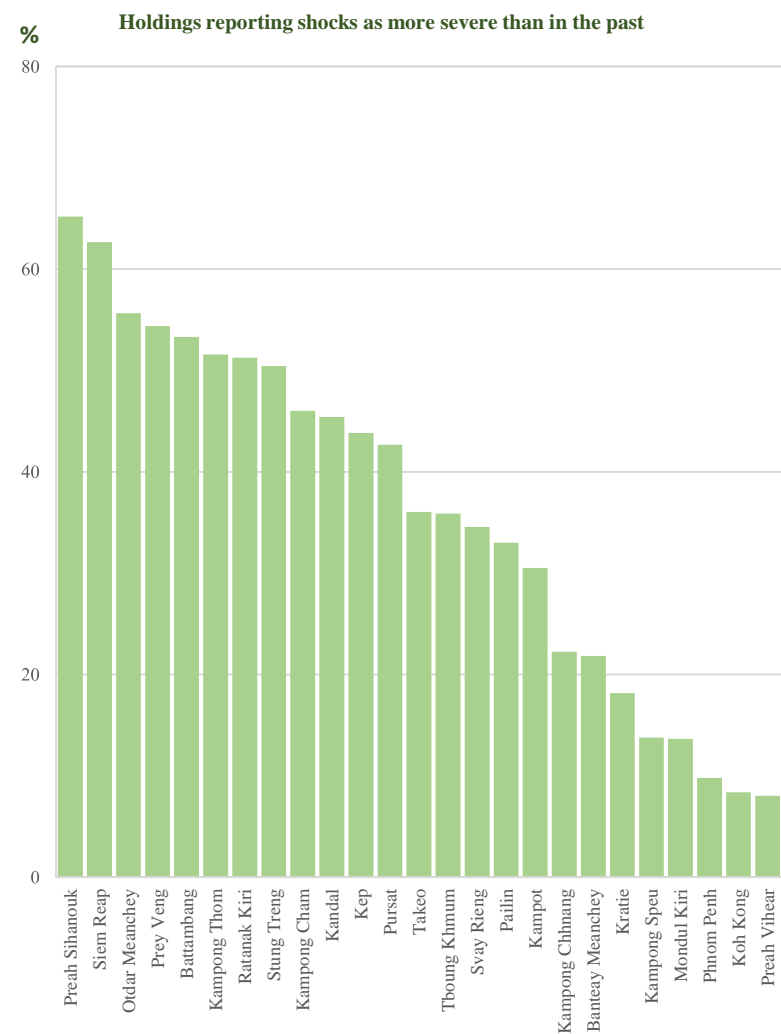**Takeo**
Kampot
Kep

0   50   100 Km

1:2,500,000

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Table 7.4: Holdings reporting shocks as more severe than in the past

Province code	Province name	Holdings reporting shocks as more severe than in the past	Holdings reporting shocks as more severe than in the past (%)
01	Banteay Meanchey	25,482	21.8
02	Battambang	62,082	53.3
03	Kampong Cham	47,936	46.0
04	Kampong Chhnang	24,877	22.3
05	Kampong Speu	19,873	13.8
06	Kampong Thom	46,338	51.6
07	Kampot	32,238	30.5
08	Kandal	16,482	45.4
09	Koh Kong	3,191	8.4
10	Kratie	22,246	18.2
11	Mondul Kiri	1,628	13.7
12	Phnom Penh	4,755	9.8
13	Preah Vihear	5,181	8.0
14	Prey Veng	60,707	54.4
15	Pursat	35,484	42.7
16	Ratanak Kiri	23,713	51.3
17	Siem Reap	49,068	62.7
18	Preah Sihanouk	1,369	65.2
19	Stung Treng	5,151	50.4
20	Svay Rieng	11,903	34.6
21	Takeo	16,792	36.0
22	Otdar Meanchey	29,194	55.7
23	Kep	546	43.8
24	Pailin	3,457	33.0
25	Tboung Khmum	42,028	35.9

Holdings reporting shocks as more severe than in the past

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

# Map 7.5: Female-headed households in percent, by province

CAMBODIA:

Total number of holdings : 1,726,337

Percentage of female-headed households : 23.5%

Around one quarter of the Cambodian households covered by the CIAS 2019 are female-headed. This rate even reaches more than one thrid of the households in Prey Veng province (34.9%), while only 6.4% of the households in Pailin are led by a woman.

Legend

Water

Female-headed households (%)

- ≤ 15.0
- 15.1 - 20.0
- 20.1 - 25.0
- 25.1 - 30.0
- > 30.0

Banteay Meanchey
Otdar Meanchey
Preah Vihear
Stung Treng
Ratanak Kiri
Siem Reap
Pailin
Battambang
Kampong Thom
Mondul Kiri
Kratie
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Svay Rieng
Preah Sihanouk
Kampot
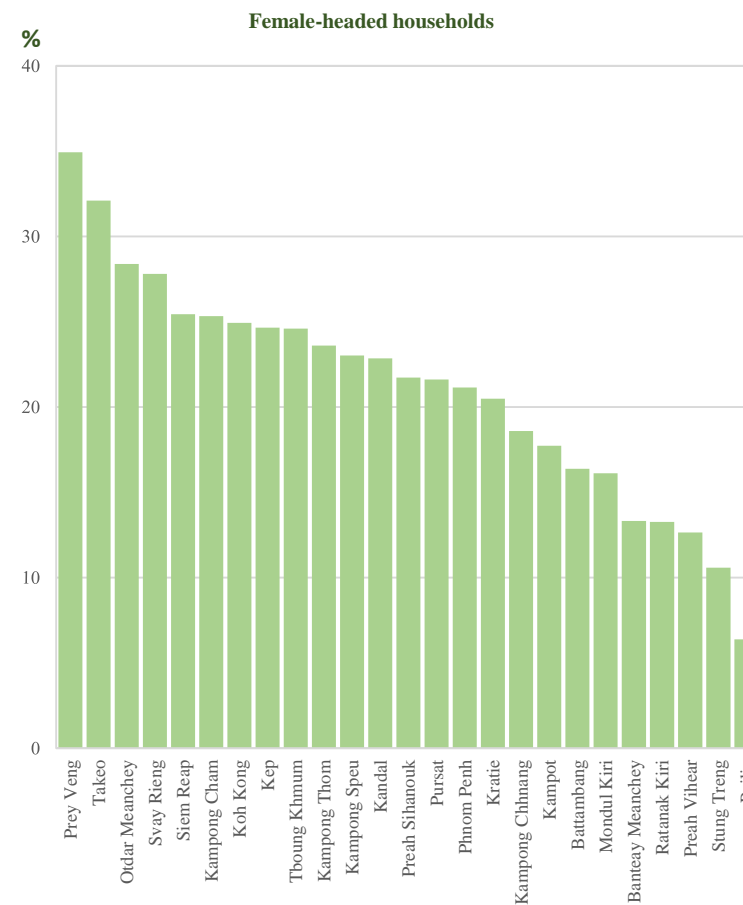Takeo
Kep

0 50 100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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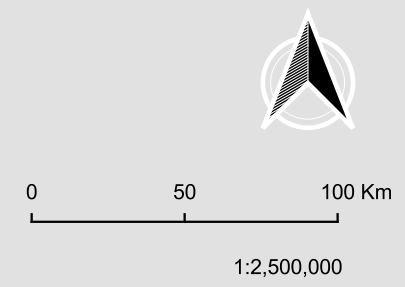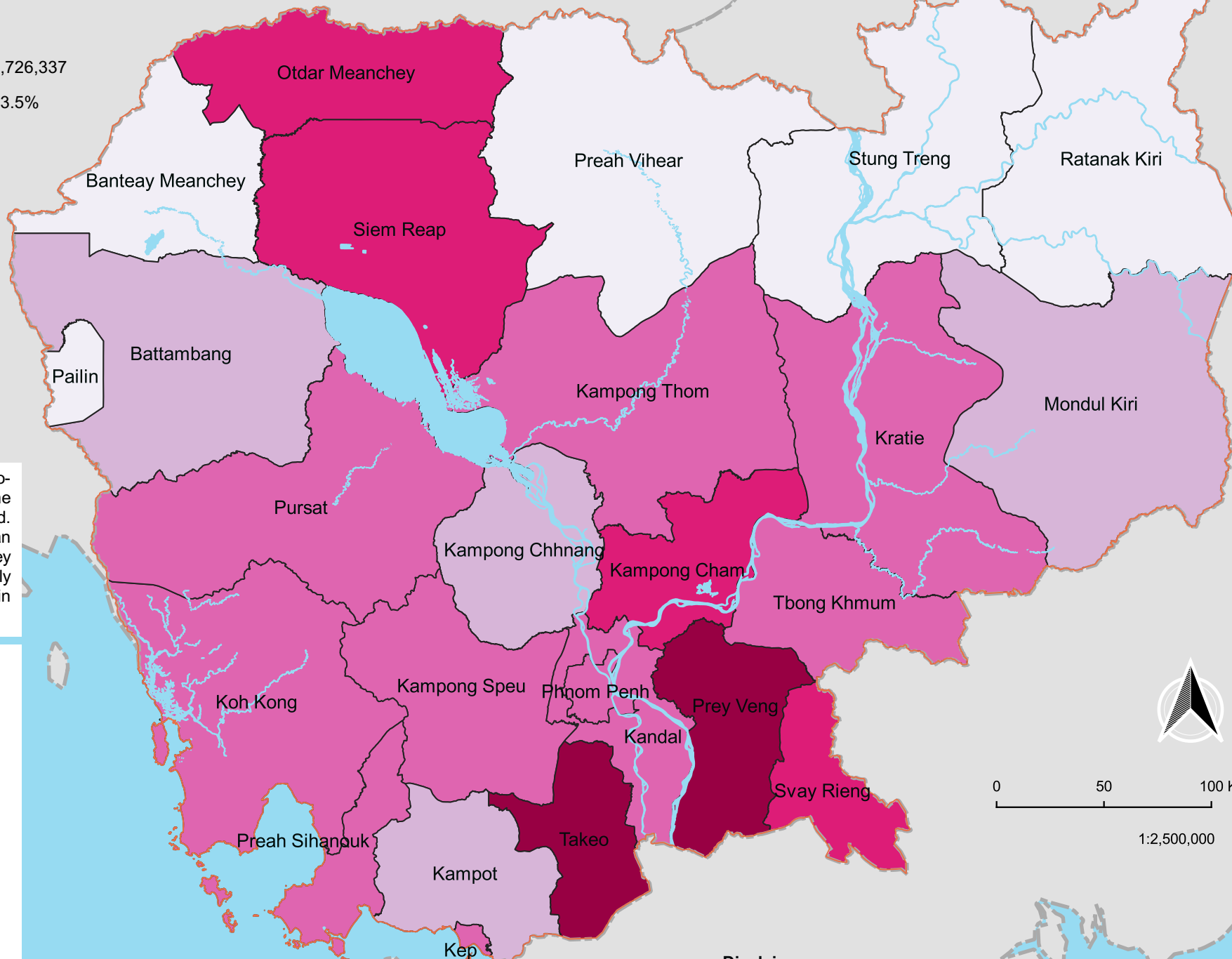
Disclaimer
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Table 7.5: Female-headed households

Province code	Province name	Female-headed households	Female-headed households (%)
01	Banteay Meanchey	146,386	13.3
02	Battambang	215,867	16.4
03	Kampong Cham	242,257	25.3
04	Kampong Chhnang	171,137	18.6
05	Kampong Speu	293,722	23.0
06	Kampong Thom	240,274	23.6
07	Kampot	212,199	17.7
08	Kandal	177,796	22.8
09	Koh Kong	23,485	24.9
10	Kratie	79,336	20.5
11	Mondul Kiri	19,653	16.1
12	Phnom Penh	40,752	21.1
13	Preah Vihear	69,040	12.6
14	Prey Veng	280,828	34.9
15	Pursat	120,004	21.6
16	Ratanak Kiri	58,033	13.3
17	Siem Reap	283,042	25.4
18	Preah Sihanouk	21,109	21.7
19	Stung Treng	37,148	10.6
20	Svay Rieng	194,234	27.8
21	Takeo	288,791	32.1
22	Otdar Meanchey	68,368	28.4
23	Kep	10,294	24.6
24	Pailin	14,588	6.4
25	Tboung Khmum	202,254	24.6

Female-headed households

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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8. Sustainable Development Goal

Map 8.1: Small-scale holders in percent, by province

CAMBODIA:

Percentage of small-scale holders: 74.6%

As per the SDG definition, around nine in ten holdings can be considered as small-scale holdings in Phnom Penh and Kandal provinces. On the contrary, Otdar Meanchey has the lowest percentage of small-scale holders 34.3%.

Legend

Water

Small-scale holders (%)

≤ 51.0
51.1 - 61.0
61.1 - 71.0
71.1 - 81.0
> 81.0
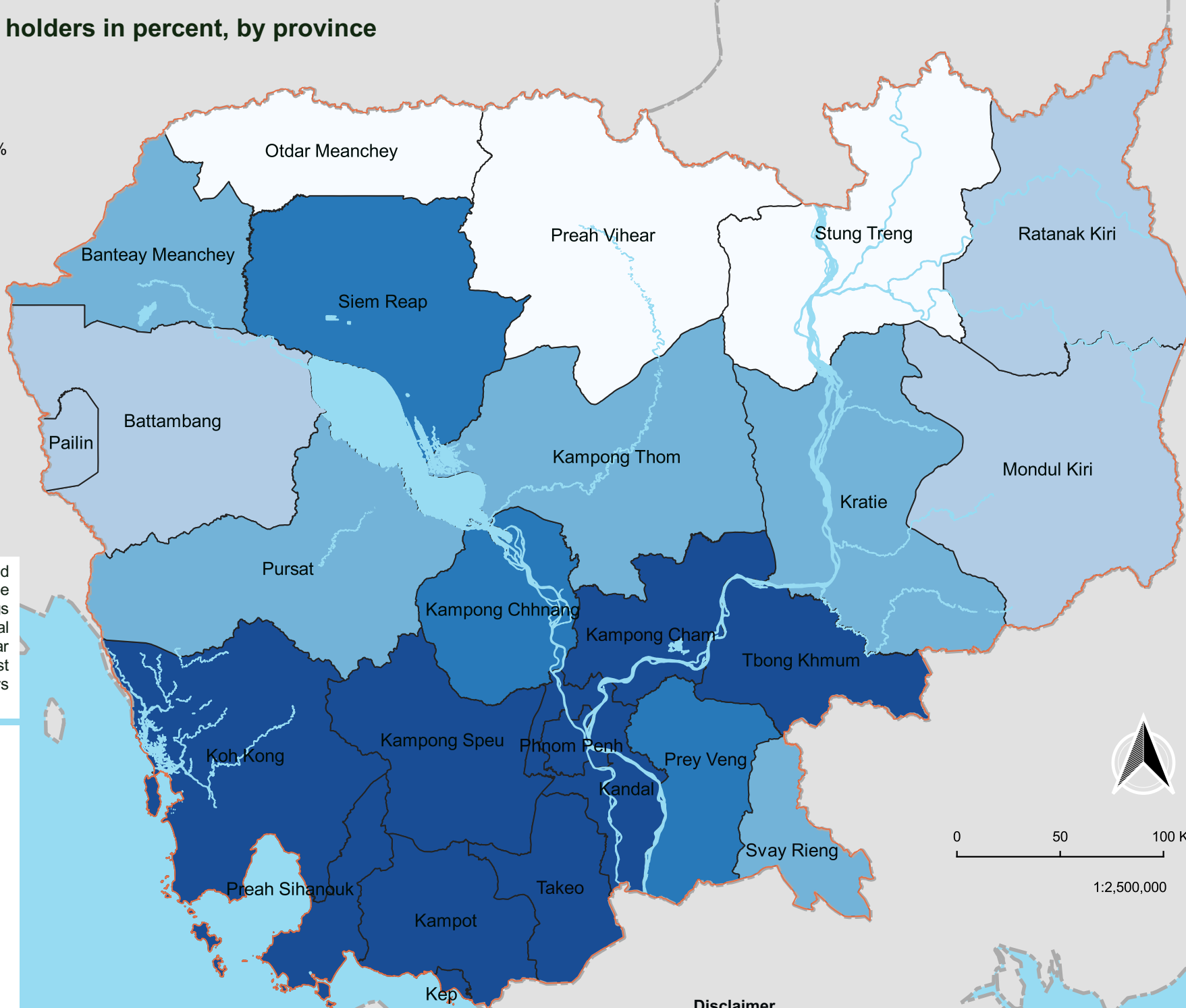
Otdar Meanchey
Banteay Meanchey
Siem Reap
Preah Vihear
Stung Treng
Ratanak Kiri
Pailin
Battambang
Kampong Thom
Kratie
Mondul Kiri
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Preah Sihanouk
Takeo
Svay Rieng
Kampot
Kep

0 50 100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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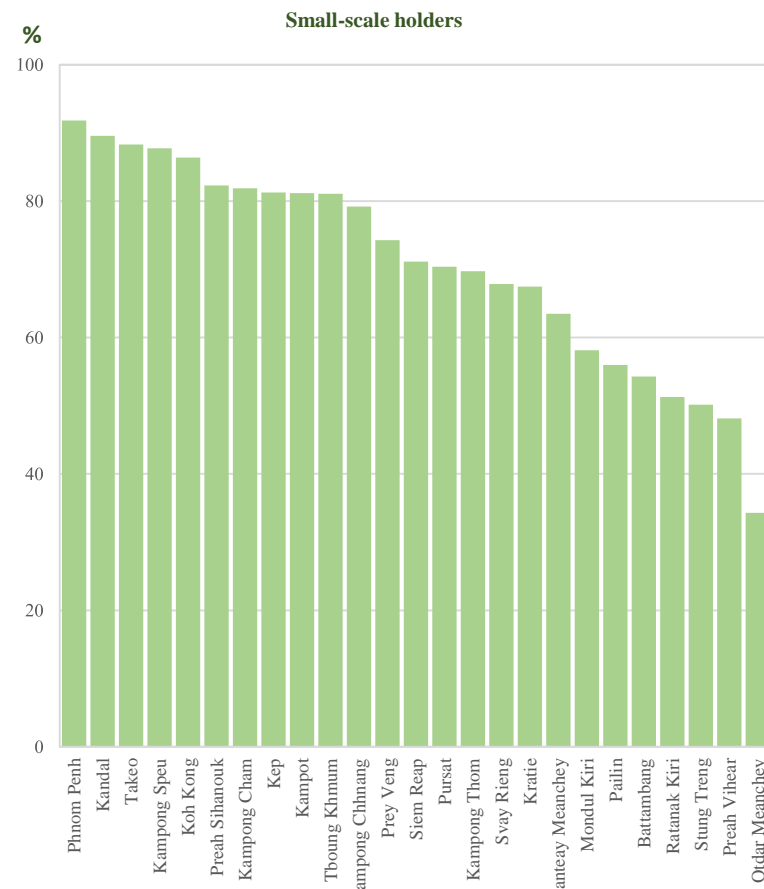
Table 8.1: Small-scale holders[i]

Province code	Province name	Small scale holders (%)
01	Banteay Meanchey	63.5
02	Battambang	54.3
03	Kampong Cham	81.9
04	Kampong Chhnang	79.2
05	Kampong Speu	87.7
06	Kampong Thom	69.7
07	Kampot	81.2
08	Kandal	89.6
09	Koh Kong	86.4
10	Kratie	67.5
11	Mondul Kiri	58.1
12	Phnom Penh	91.8
13	Preah Vihear	48.1
14	Prey Veng	74.2
15	Pursat	70.4
16	Ratanak Kiri	51.3
17	Siem Reap	71.1
18	Preah Sihanouk	82.3
19	Stung Treng	50.2
20	Svay Rieng	67.8
21	Takeo	88.3
22	Otdar Meanchey	34.3
23	Kep	81.2
24	Pailin	56.0
25	Tboung Khmum	81.1

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

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[i] Small-scale holders are defined using a combination of two criteria, namely the physical size of the food producer, as expressed by the amount of operated land and number of livestock heads in production, and the economic size of the food producer, as expressed by its revenues. They are identified as the producers at the intersection of the bottom 40% of the distribution of farm physical size and the bottom 40% of the distribution of holding's economic size.

Map 8.2: SDG Indicator 2.3.1. Average labor productivity of small-scale holders, in Purchasing Power Parity (PPP) dollar, by province

CAMBODIA:
Average labour productivity: 9.0 PPP per day (equivalent to 13,183 KHR per day)

The labor productivity among small-scale holders, as calculated under the SDG 2.3.1. definition, is highest in Kep and Stung Treng provinces (respectively 34.1 PPP and 26.5 PPP), and lowest in Preah Vihear province (2.2 PPP).

Legend

Water

Labor productivity of small-scale holders, in Purchasing Power Parity dollar

- ≤ 5.0
- 5.1 - 7.0
- 7.1 - 10.0
- 10.1 - 15.0
- > 15.0

Otdar Meanchey
Banteay Meanchey
Preah Vihear
Stung Treng
Ratanak Kiri
Siem Reap
Battambang
Pailin
Kampong Thom
Kratie
Mondul Kiri
Pursat
Kampong Chhnang
Kampong Cham
Tbong Khmum
Koh Kong
Kampong Speu
Phnom Penh
Prey Veng
Kandal
Preah Sihanouk
Takeo
Svay Rieng
Kampot
Kep
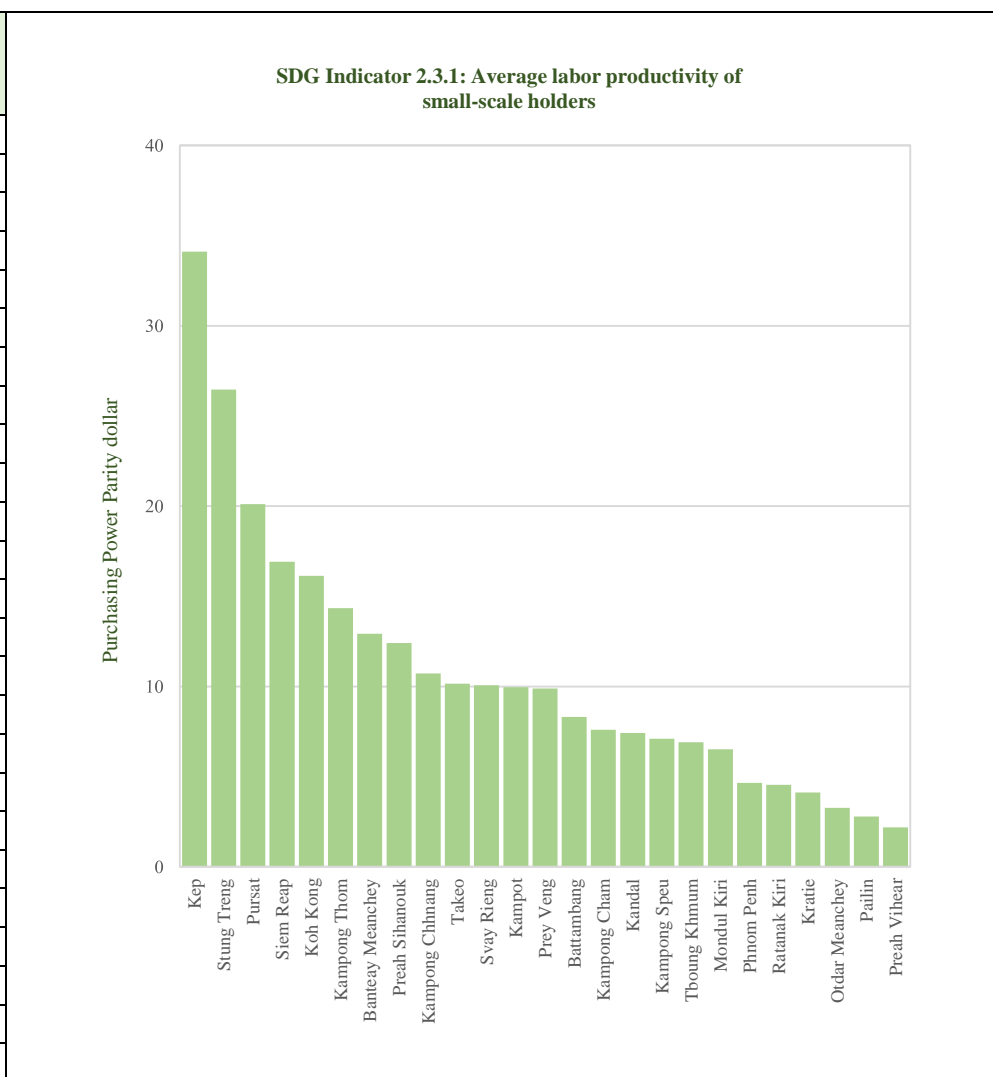
0   50   100 Km

1:2,500,000

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF

80
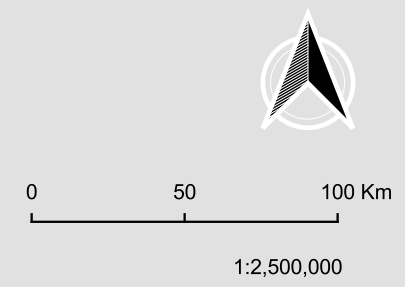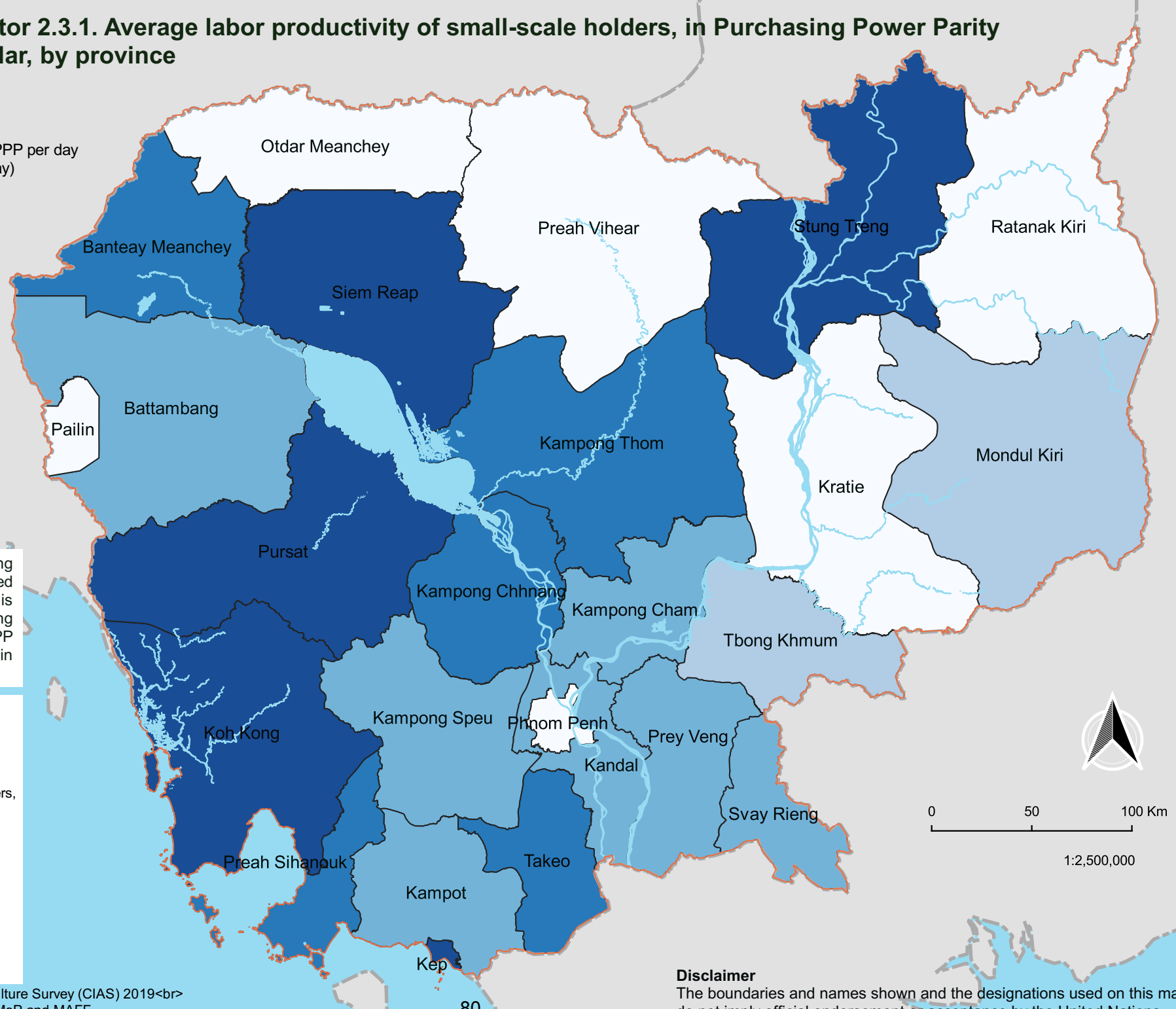
Disclaimer
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Table 8.2: SDG Indicator 2.3.1: Average labor productivity of small-scale holders, in Purchasing Power Parity (PPP) dollar

Province code	Province name	Agricultural output per labour day, PPP dollar
01	Banteay Meanchey	12.9
02	Battambang	8.3
03	Kampong Cham	7.6
04	Kampong Chhnang	10.7
05	Kampong Speu	7.1
06	Kampong Thom	14.3
07	Kampot	10.0
08	Kandal	7.4
09	Koh Kong	16.1
10	Kratie	4.1
11	Mondul Kiri	6.5
12	Phnom Penh	4.7
13	Preah Vihear	2.2
14	Prey Veng	9.9
15	Pursat	20.1
16	Ratanak Kiri	4.5
17	Siem Reap	16.9
18	Preah Sihanouk	12.4
19	Stung Treng	26.5
20	Svay Rieng	10.1
21	Takeo	10.2
22	Otdar Meanchey	3.3
23	Kep	34.1
24	Pailin	2.8
25	Tboung Khmum	6.9

SDG Indicator 2.3.1: Average labor productivity of small-scale holders

Source: Cambodia Inter - Censal Agriculture Survey (CIAS) 2019
National Institute of Statistics, MoP and MAFF