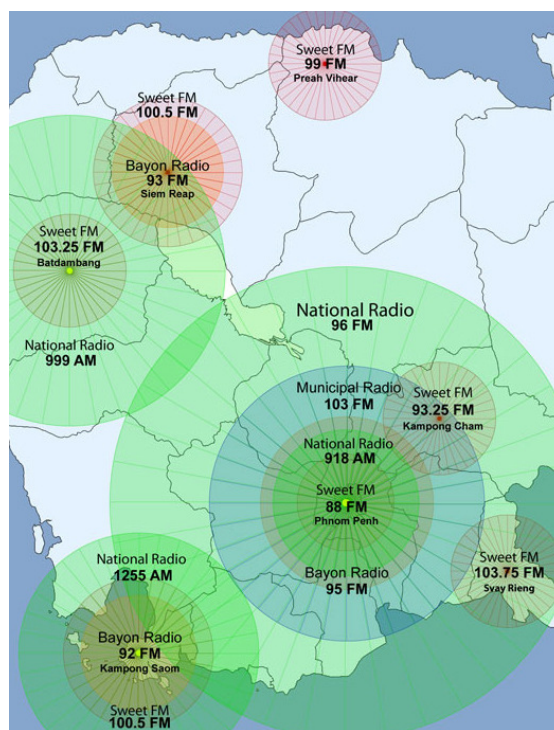




# Ministry of Health Essential Drugs Bureau

## Media habits of women of reproductive age



## Final Report Cambodia, July 2008

Ian Ramage, Kim Hour Ramage, John Weeks and Gabriel Pictet  
Domrei Research and Consulting



Financial Cooperation between Royal Kingdom of Cambodia and Germany  
Reproductive Health Program Phase II, Project No. 2005 65 135

## **Executive summary**

### ***Background and aims***

Following the findings and recommendation of the 2004 contraceptive survey,<sup>1</sup> the Essential Drugs Bureau (EDB), with KFW funding, planned a contraceptive campaign in two phases. The first pilot phase contracted Cambodia Health Education Media Service (CHEMS) to develop and broadcast six television and eight radio spots covering different aspects of long-term contraception. The campaign was launched in 2007 and was broadcast for three months. This was to be followed by a second larger campaign.

The objectives of the campaign are to strengthen women's confidence in modern contraceptive methods, to inform them of the side effects and benefits associated with modern contraceptive methods, to empower them with knowledge about contraceptive methods and dispel misunderstandings about side effects of the modern contraceptive methods - particularly for the Intra-Uterine Device (IUD).

At the end of the pilot phase, Domrei Research and Consulting conducted a campaign impact survey<sup>2</sup> in four provinces surrounding Phnom Penh: Kandal, Takeo, Kampong Speu and Kampong Chhnang. As the pilot campaign had been short and impact was expected to be low, Domrei and the EDB used the opportunity of the campaign impact survey to gather some additional data on media habits to inform the second phase of the campaign.

This first survey gathered useful data for better targeting health promotion efforts for women of reproductive age. As expected, the pilot campaign impact was low and this could mainly be traced to a poor choice of channels and times for broadcasting the campaign.

In the planning stage for the second campaign, Domrei and the Ministry of Health (MoH) shared concerns that the results from our small sample of women from the central provinces may not be representative of women in more remote areas of Cambodia.

Therefore, in preparation for Phase 2 of the MoH promotion campaign, Domrei conducted a second media habits survey to determine media and reproductive habits in four border provinces.

In this report, we present the results of the first and the second media habits surveys together to allow for comparison. With these results to inform the development of a broadcast strategy, we hope that the second phase of the campaign will better reach women in remote parts of Cambodia.

Overall, there is very little detailed data available on media habits in Cambodia. Therefore, we also hope that these results may be useful for other agencies that are carrying out Behaviour Change Communication (BCC) and promotion activities with rural Cambodian women.

### ***Method***

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<sup>1</sup> Ramage and Pictet, *Family Planning Survey: Contraception among Married Women in Cambodia*, Domrei, MoH, KFW Development Bank, April 2005.

<sup>2</sup> Ramage and Pictet, *Impact Survey of the Contraceptive promotion campaign*, Domrei, MoH, KFW Development Bank, May 2007.

We conducted the first survey in the central provinces of Kampong Chhnang, Kampong Speu, Takeo and Kandal. In 2008, we administered a revised version of the survey questionnaire in four border provinces: Koh Kong, Banteay Meanchey, Stung Treng and Mondul Kiri. We randomly selected two communes in each of the eight provinces, and two villages in each commune (total 32 villages).

We designed the sampling procedure to meet the survey objectives. The required sample is 250 women of reproductive age from 15-45 years old. Domrei field researchers interviewed 16 women of reproductive age in each village. Because the promotion campaign emphasises long-term contraception targeting older women, we over-sampled women aged 30 to 45 in 2008. The total sample size objective was 250 women of reproductive age in both surveys.

The following summary of results is only for women in the four border provinces. For comparisons between central provinces and the border provinces, please see the results in the main body of the report.

### ***1) Media habits for women of reproductive age***

- Among the 268 respondents, 195 listen to radio regularly and 144 watch TV regularly. Seven percent are literate. Their choice of channels varies by province and (to a lesser degree) by age group.
- TV5 is the most popular television channel, with a market share of 40 percent. Following TV5 are CTN (26%), Bayon (21%) and a diverse range of other stations.
- Bayon Radio is the most popular radio station, with a market share of 26 percent. Following is FM 100.5 ('Sweet FM', 21% - also rebroadcast on other frequencies) and FM 96 (National Radio, 13%). Regional radio stations took a substantial part of the listenership in their respective provinces, ranging from 5% to 33%.
- Age is a factor in watching and listening habits, but there is more similarity than variance. The top radio stations are listened to in almost equal numbers, with younger women showing a slight preference for popular music and current affairs.
- Radio is the leading source of information for women surveyed, followed by 'word of mouth' and television. While print media was not often mentioned in these rural provinces, the majority of respondents welcomed printed information over other media.

### ***2) Contraceptive awareness and use for women of reproductive age***

- Awareness is highest regarding the daily pill, which also garnered the most interest in receiving more information. Respondents also had a high degree of awareness regarding contraceptive injections (2<sup>nd</sup> highest response) and condoms (3<sup>rd</sup> highest). Fourth is the Intrauterine device (IUD).
- Contraceptive usage bore some similarities to respondents' degree of awareness: the first three most commonly used methods are the daily pill, the injection and condoms. However, while awareness of the (IUD) was higher than other methods, its use was much lower.
- There is a quantifiable demand from women for more information on the various contraceptive methods, with the top four being the daily pill, the injection, condoms and the IUD.

### ***3) Recommendations***

1. Select broadcast channels and schedules based on a more detailed analysis of the Media Habits Survey and the Campaign Impact Survey.
2. Develop media profiles for different groups of women such as higher parity, differing age groups, differing literacy and socio-economic status.

3. Use these profiles to develop a broad-based multimedia campaign (Radio, TV, print, etc.) that fulfils the MoH's goals while addressing women's quantitative and qualitative survey responses.
4. Due to diverse media habits, coordinate with other organisations conducting outreach to insure there is no overlap and that messages are complementary.
5. Plan for increased demand for contraception and make provider information easily accessible to those with limited or no literacy.

## **Acknowledgements – KfW Media Survey II**

Domrei Research and Consulting thanks its field staffs for their dedication and excellent work.

Ms. Chhy Sophearith  
Ms. Chy Chanleakhena  
Ms. Inn Seiklim  
Mrs. Ath Silonn

Ms. Sombo Chanthy  
Ms. Kong Pheara  
Ms. Uk Dameng  
Ms. Leang Chheng Lim

Ian Ramage and Kim Hour Ramage coordinated and supervised the 2008 survey. Mr. Khim Sarun prepared Field research materials.

Ian Ramage, Kim Hour Ramage and Chhy Sophearith designed the survey instruments in Khmer and in English and trained the field staff. Mr. Keo Kimhorth, Ms. Chhy Sophearith and Ms Chy Chanleakhena entered the data.

Gabriel Pictet managed and analysed the survey data and, with John Weeks, prepared the draft report, with inputs from the Domrei research team. Ian Ramage, who finalised the report, added additional analysis and revisions.

Domrei would also like to thank the two hundred and sixty-eight respondents who took the time to answer our questions.

KfW through the Essential Drug Bureau at the Ministry of Health funded this survey.

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## Abbreviations

AM	Amplitude modulation
BCC	Behaviour Change Communication
CHEMS	Cambodia Health Education Media Service
CTN	Cambodia Television Network
EDB	Essential Drug Bureau
FM	Frequency Modulation
IUD	Intra-uterine Device
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
MoH	Ministry of Health
RFA	Radio Free Asia
TV	Television
VOA	Voice of America
WRA	Women of Reproductive Age

## Introduction

Following the findings and recommendation of the 2004 contraceptive survey,<sup>3</sup> the Essential Drugs Bureau (EDB), with KFW funding, planned a contraceptive campaign in two phases. The first pilot phase contracted Cambodia Health Education Media Service (CHEMS) to develop and broadcast six television and eight radio spots covering different aspects of long-term contraception. The campaign was launched in 2007 and was broadcast for three months. This was to be followed by a second larger campaign.

The objectives of the campaign are to strengthen women's confidence in modern contraceptive methods, to inform them of the side effects and benefits associated with modern contraceptive methods, to empower them with knowledge about contraceptive methods and dispel misunderstandings about side effects of the modern contraceptive methods - particularly for the IUD.

At the end of the pilot phase, Domrei Research and Consulting conducted a campaign impact survey<sup>4</sup> in four provinces surrounding Phnom Penh: Kandal, Takeo, Kampong Speu and Kampong Chhnang. As the pilot campaign had been short and impact was expected to be low, Domrei and the EDB used the opportunity of the campaign impact survey to gather some additional data on media habits to inform the second phase of the campaign.

This first survey gathered useful data for better targeting health promotion efforts for women of reproductive age. As expected, the pilot campaign impact was low and this could mainly be traced to a poor choice of channels and times for broadcasting the campaign.

In the planning stage for the second campaign, Domrei and MoH shared concerns that the results from our small sample of women from the central provinces may not be representative of women in more remote areas of Cambodia.

Therefore, in preparation for Phase 2 of the MoH promotion campaign, Domrei conducted a second 'Media Habits Survey' to determine media and reproductive habits in four border provinces.

Overall, there is very little detailed data available on media habits in Cambodia. Therefore, we also hope that these results may be useful for other agencies that are carrying out BCC and promotion activities with rural Cambodian women.

The specific objectives of the second survey were to collect and analyse data from a random sample of ~250 women of reproductive age (15-45 years) to assess:

- Specific habits and characteristics of rural women of reproductive age associated with the mass media.
- Knowledge, attitudes and perception about contraception.

## Methods, data and limitations

### *Method*

### Sampling and Locations

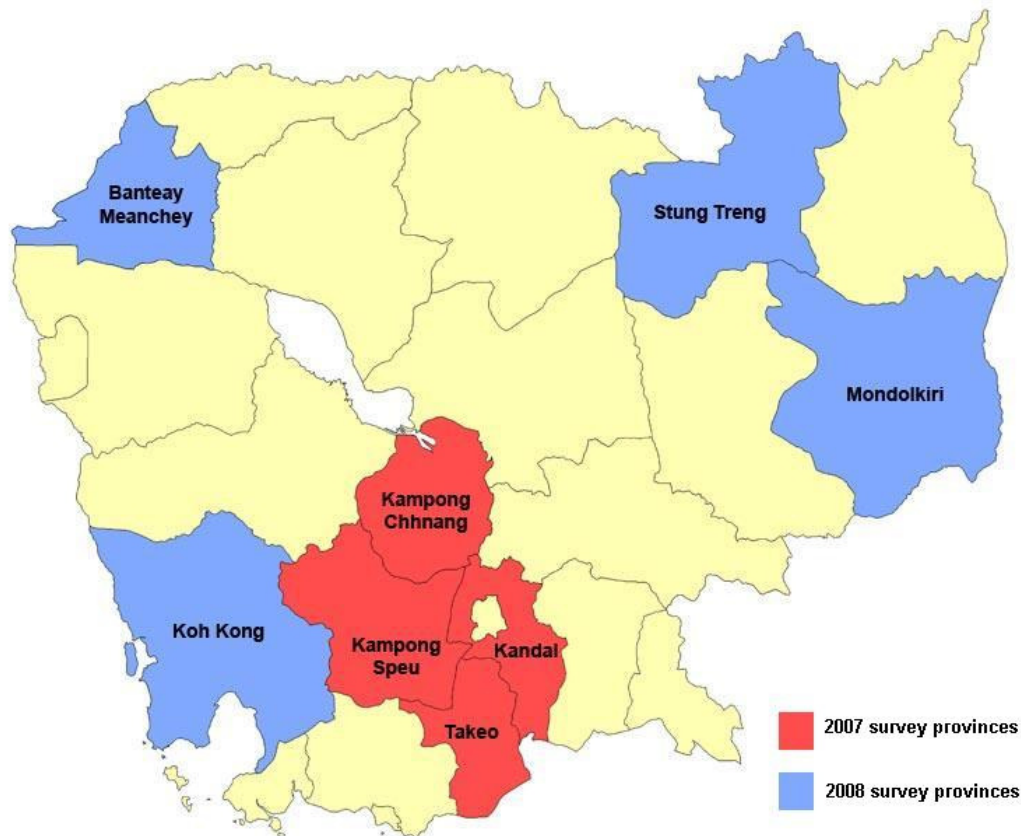
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We conducted the first survey in the central provinces of Kampong Chhnang, Kampong Speu, Takeo and Kandal. In 2008, we administered a revised version of the survey questionnaire in four border provinces: Koh Kong, Banteay Meanchey, Stung Treng and Mondolkiri. We randomly selected two communes in each of the eight provinces, and two villages in each commune (total 32 villages).



**Figure 1: Provinces covered by the two media surveys**

Teams achieved systematic household sampling by requesting participation from all eligible women in randomly selected households in each village. The sample size from each village was 16 women of reproductive age (WRA).

In one village in Stung Treng, it was not possible to locate 16 eligible respondents as most women from the village were away for several days planting rice in distant fields. In this case the interview team oversampled women from the other three villages in Stung Treng to meet the overall sample objective.

Teams selected a random starting point from a sketch map of the village. The team calculated the sampling interval by dividing the total number of households in the village by the required sample (16). Teams chose the house nearest the starting point as the first house and used the sampling interval to select additional households until they reached the required sample.

We designed the sampling procedure to meet the survey objectives. The required sample is 250 women of reproductive age from 15-45 years old. Domrei field researchers interviewed 16 women of reproductive age in each village. Because the promotion campaign emphasises

long-term contraception targeting older women, we over-sampled women aged 30 to 45 in 2008. The total sample size objective was 250 women of reproductive age in both surveys.

### **Instrument design**

Domrei designed a structured questionnaire to record data on media habits, knowledge and experience in contraception, exposure and opinion on the campaign (2007 only) and ideas on family planning promotion (2007, expanded in 2008). Both instruments start with an identical section that captures the respondents' socio-demographic background and the respondent's exposure to media – specifically, viewing habits. In 2008, interviewers asked for qualitative feedback on popular broadcast media. In both surveys, interviewers administered a short objective literacy test at the end of the interview to assess the respondents' literacy. The 2008 English version of the instrument appears as an annex to this report. The Khmer instruments and the 2007 English questionnaire are available on request.

### **Data collectors**

For both surveys, Domrei recruited and trained eight experienced data collectors. The field staff recruited had all successfully worked on several surveys with Domrei in the past, and all have excellent experience in data collection. All field staff had previously been trained in ethical research at Domrei. In addition, each interviewer agreed and signed the Domrei Ethical Guidelines before starting their contracts.

### **Interviewer training and Pre-test**

We trained the interviewers at the Domrei office. Training covered the following topics:

- Review of media survey objectives
- Survey objectives;
- Instrument review;
- Interview role plays;
- Instrument pre-test;
- Instrument revision and
- Fieldwork planning.

### **Data collection**

Four teams were set up for data collection. Each team consisted of two female interviewers. Each team went to a different province and collected data from the randomly chosen villages in that province.

Interviewers checked each other's questionnaires before leaving the village. In the case of any missing data, the interviewer returned to the household to ask the women the question and complete the answer.

### **Data processing and validation**

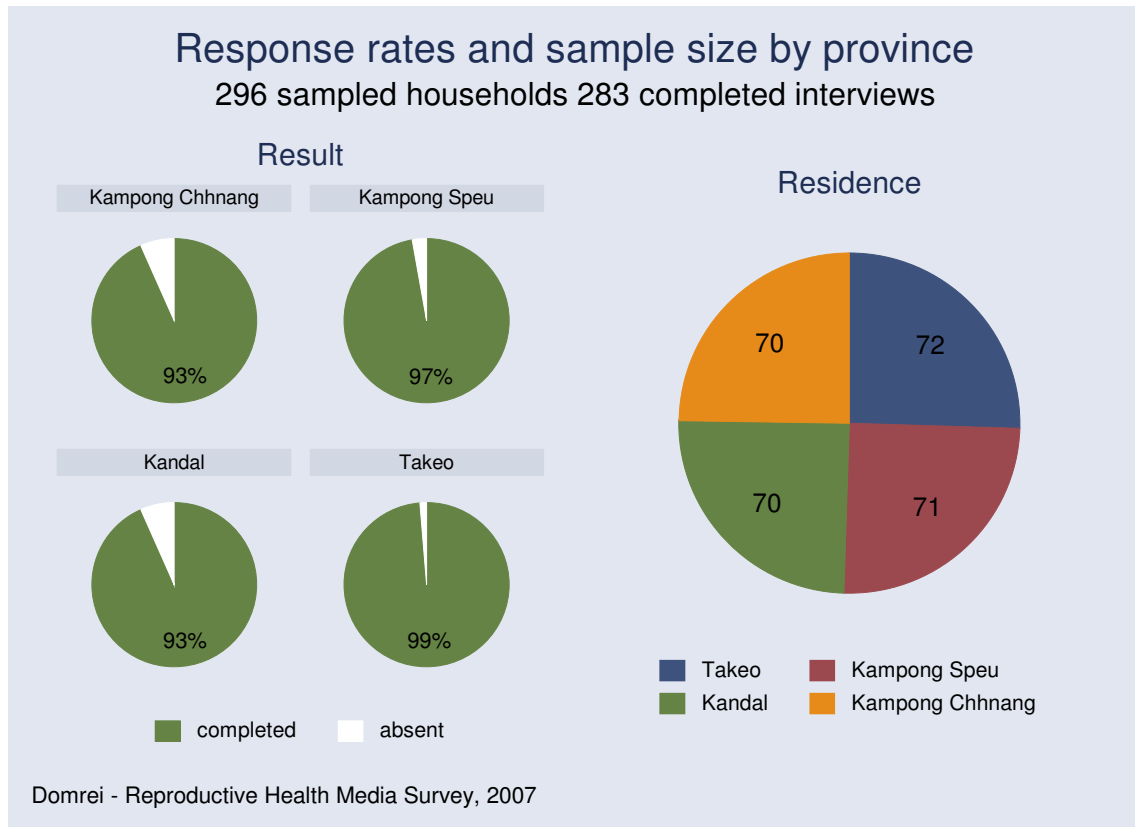
Domrei staff entered the survey data on a tailor-made Access database that included legal values for all numerical fields, automatic skips for all filter questions and consistency checks. A Domrei co-director ran queries to identify records with inconsistent or counter-intuitive data and checked every suspect record personally.

### **Data analysis**

We analysed the quantitative data on STATA, and present the statistics in graphic or tabular form. Results combining the 15-29 and 30-45 age groups in the 2008 sample are not weighted in this report. Comparisons that are statistically significant at 95 percent are noted with asterisks (\*). We present confidence intervals at 95 percent when appropriate. Results should not be generalised to all women of reproductive age in the whole country, as background characteristics (e.g. literacy, television ownership) and stations vary by province.

### Data

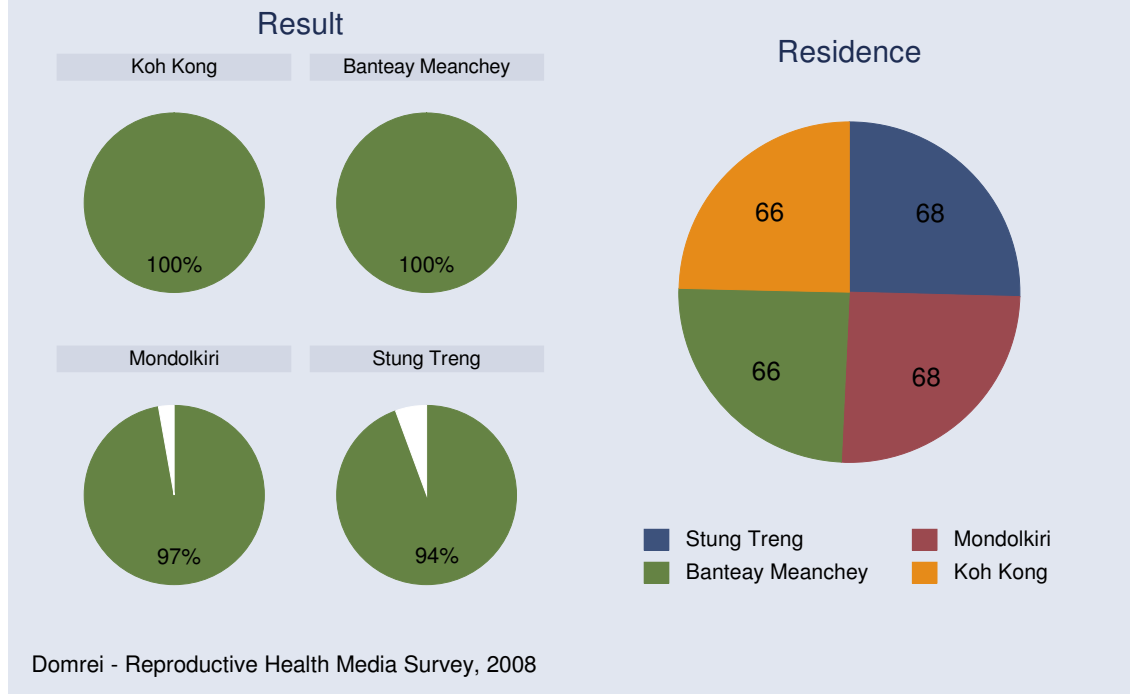
Figure 3 and Table 1 describe the sample data. Out of the 296 randomly selected households in 2007, 283 (96%) interviews were completed. Out of the 274 randomly selected households in 2008, 268 (97.8%) interviews were completed. These are very acceptable response rates, so we do not expect non-response to be a source of bias.



**Figure 2: Response rates and sample size by province, central provinces**

## Response rates and sample size by province

274 sampled households 268 completed interviews



**Figure 3: Response rates and sample size by province, border provinces**

**Table 1: Sample size by province and village, all provinces**

<b>Village</b>	<b>observations (n)</b>	<b>Village</b>	<b>observations (n)</b>
<b>Kampong Chhnang</b>		<b>Kandal</b>	
Chong Kaoh	18	Chrouy Ampil	19
Kandal	18	Preaek Thum	17
Sala Lekh Pram	18	Trapeang Chrey	16
Chan Kiek	16	Chong Khsach	18
<b>Total</b>	<b>70</b>	<b>Total</b>	<b>70</b>
<b>Kampong Speu</b>		<b>Takeo</b>	
Krang Slaeng	17	Sdau Aem	18
Krang Krouch	18	Trapeang Trayueng	18
Ti Muoy	18	Ta Buor	18
Ti Pram	18	Ta Mouk	18
<b>Total</b>	<b>71</b>	<b>Total</b>	<b>72</b>
<b>Total completed interviews in 2007</b>			<b>283</b>
<b>Village</b>	<b>observations (n)</b>	<b>Village</b>	<b>observations (n)</b>
<b>Koh Kong</b>		<b>Stung Treng</b>	
Ta Ni	16	Srae Kor Muoy	16
Preaek Chik	17	Srae Kor Pir	8
Chi Treh	17	Kaoh Sampeay	21
Prai	16	Damrei Phong	23
<b>Total</b>	<b>66</b>	<b>Total</b>	<b>68</b>
<b>Mondolkiri</b>		<b>Banteay Meanchey</b>	
Srae Huy	17	Kandal	17
Chul/Ou Yeh	17	Kien Banteay	16
Pu Rolaes	17	Kouk Ta Sokh	17
Pu Chhab	17	Ponley Cheung	16
<b>Total</b>	<b>68</b>	<b>Total</b>	<b>66</b>
<b>Total completed interviews in 2008</b>			<b>268</b>

Source: Domrei media surveys – 2007 and 2008

### **Limitations**

Domrei designed the surveys (1) under budgetary constraints and (2) to maximise the number of older women in 2008, as the overall contraceptive media campaign strategy aims to reach a significant number of the rural poor and older women.

Budget constraints also forced us to limit the sample size to ~250 women for each survey. This means that there are some random effects (see for example the age structures). While these random effects do not affect the overall results, we would recommend a larger sample size for the promotion campaign impact survey.

Our combined sample is not representative of Cambodia as a whole: it is only representative of the eight provinces taken separately (combined results presented here are not weighted

by province). The wealth indicators show that, on average, the women interviewed in 2008 come from poorer, less educated households than those we interviewed in the central provinces in 2007. For example, in the 2007 survey, 75 percent of the households had television sets in the central provinces, against 41 percent in these four peripheral provinces. These differences are not due to sampling: the border provinces are poorer than the central ones. This in turn affects media habits and the demand for family planning information and methods.

## Survey results

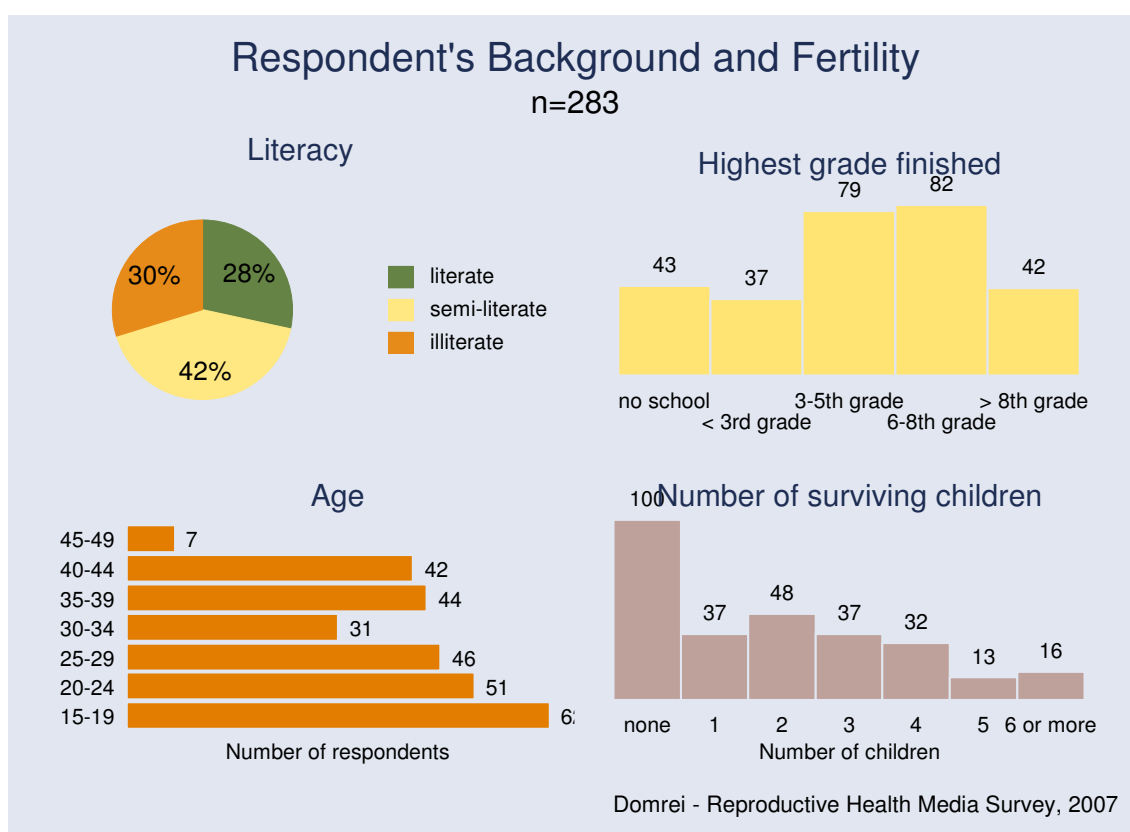
In this report, we present the results of the first and the second media habits surveys together to allow for comparison. With these results to inform the development of a campaign broadcast strategy, we hope that the second phase of the campaign will better reach women in remote parts of Cambodia.

We start by presenting the social and demographic characteristics of both samples. We then describe general media habits, with an emphasis on radio and television.

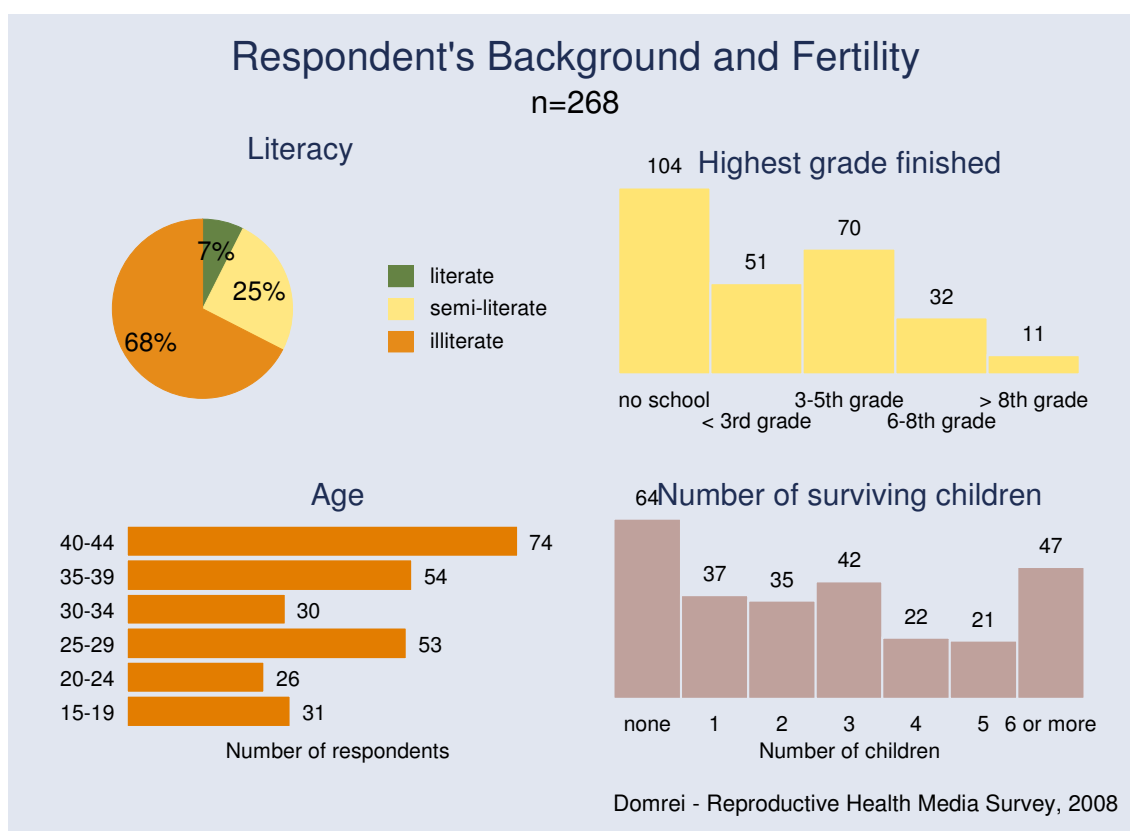
The figures below describe the socio-demographic characteristics of both samples separately to highlight the differences between central and border provinces. Less than 10 percent of the women interviewed in the border provinces are literate, compared to 28 percent in the central provinces. The proportion of women who have never gone to school is more than two times higher in the border provinces.

The age bar graph in Figure 5 shows the extent of the over-sampling strategy in the border provinces, where, as a result, over half the respondents are over thirty. This explains why in the border province sample, we have fewer respondents who are single (19 percent against 29 percent in the central provinces). Seventy-two percent are married and nine percent are separated, divorced or widowed. Twenty-four percent have no children. Those that do have children have, on average, four children, with a maximum of ten children.

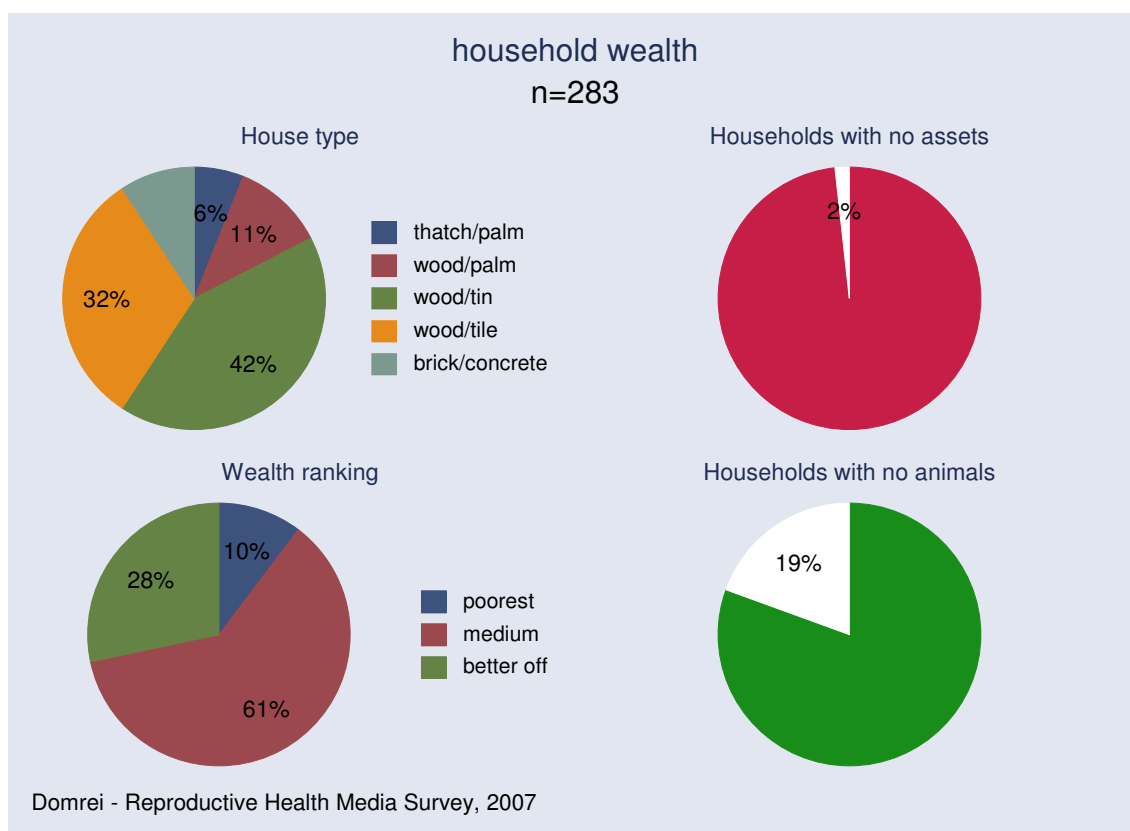
In the central provinces where we did not over sample older women, forty percent of respondents were under 25. Twenty-nine percent of the respondents were single, 65 percent were married and less than four percent were separated, divorced or widowed. One hundred respondents had no children. Those that did have children had, on average, three children, with a maximum of nine children. These differences are the result of our sampling strategy, and are not related to the demographics of the two populations.



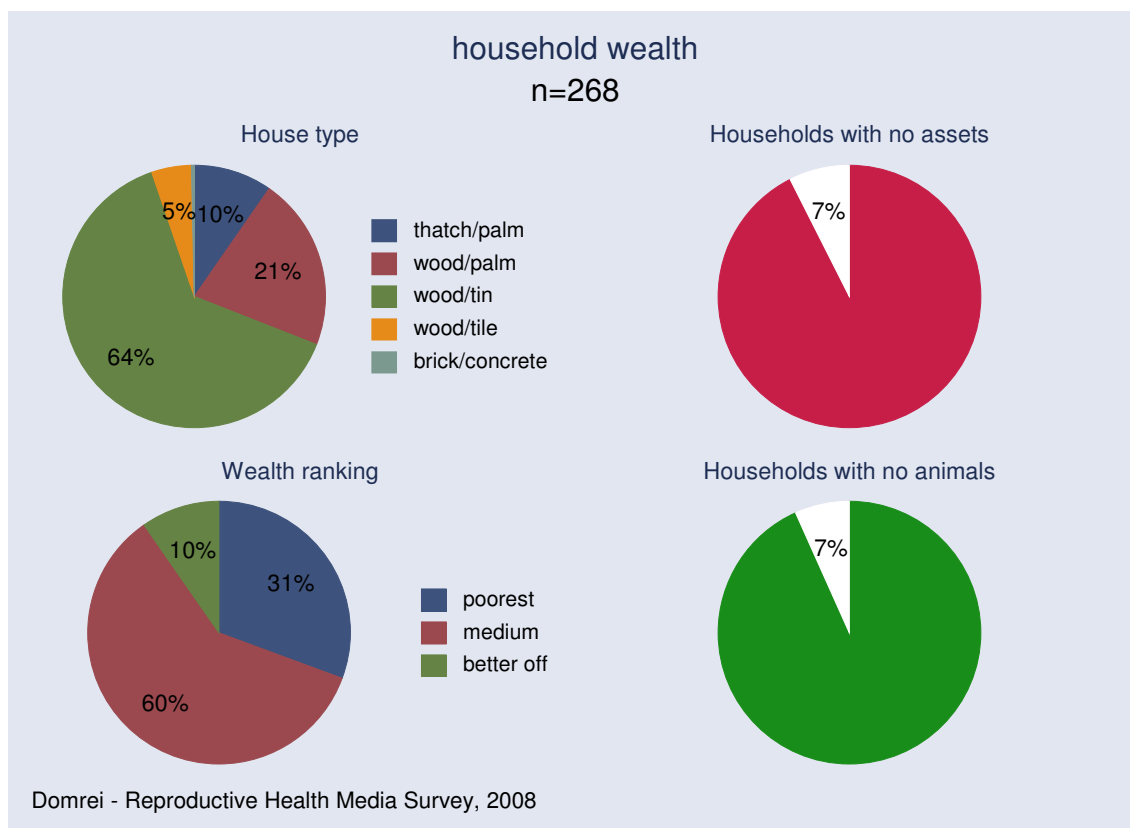
**Figure 4: Respondents' socio-demographic characteristics, central provinces**



**Figure 5: Respondents' socio-demographic characteristics, border provinces**

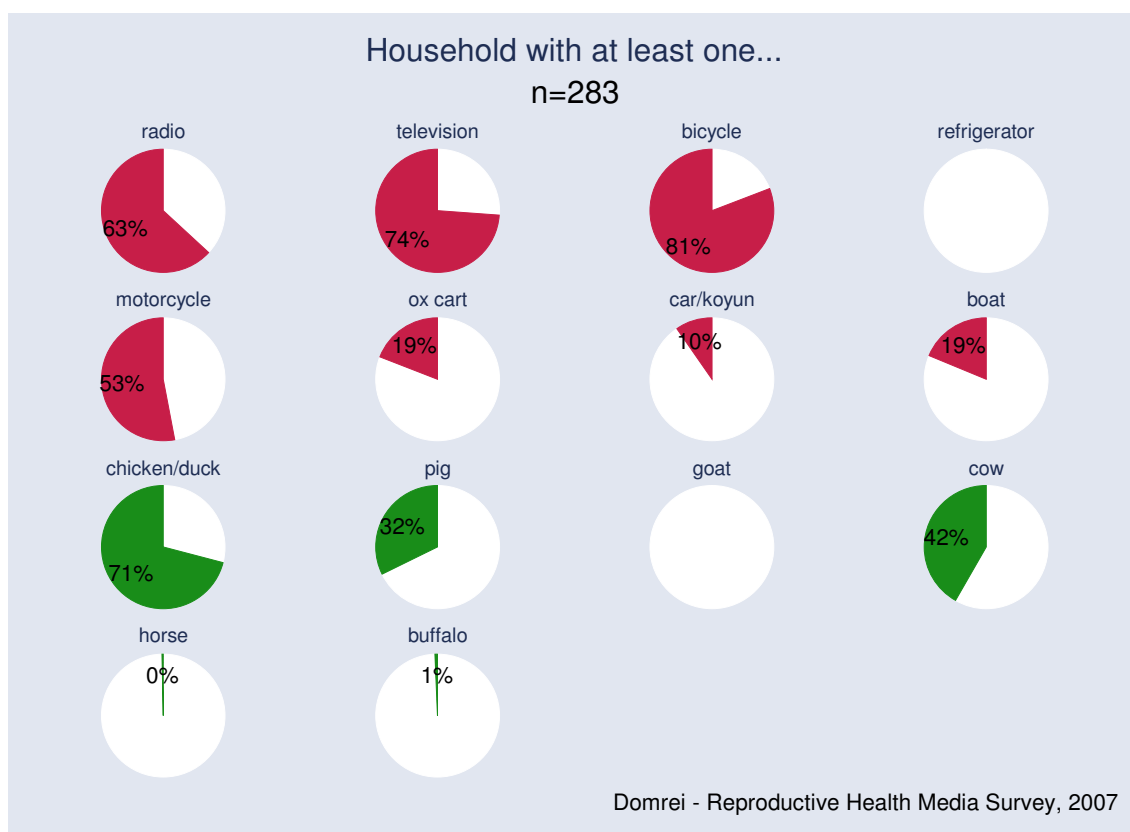


**Figure 6: Household wealth indicators, central provinces**

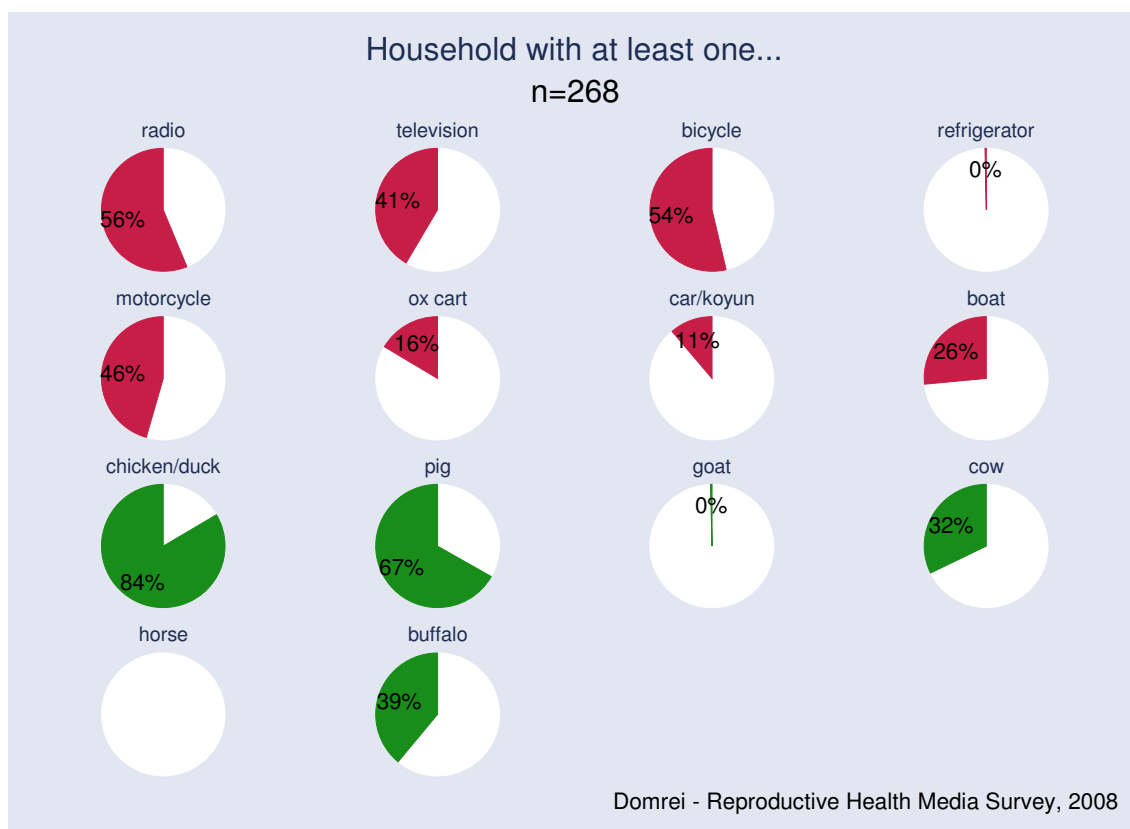


**Figure 7: Household wealth indicators, border provinces**





**Figure 8: Household assets, central provinces**



**Figure 9: Household assets, border provinces**

Over half (56 percent) of the households in the border provinces have radios, against 63 percent in the central provinces. Only two households out of five have a television set, against almost two thirds in the central provinces. The relatively low rate of radio and television ownership in the border provinces has direct implications in terms of exposure to mass media campaigns. The lower number of cars *koyuns*, motorcycles and bicycles also lowers the possibility of exposure to media outside the immediate vicinity.

### ***Mass media habits***

#### ***Radio***

The media landscape in Cambodia continues to grow and change. There are more than 30 radio stations broadcasting in the four selected border provinces combined. The most popular are 'Bayon Radio', 'Sweet FM', National Radio and Phnom Penh Municipal Radio (Figure 11).

FM 95 is Bayon Radio, affiliated with Bayon TV. FM 100.5 is a provincial rebroadcast of 'Sweet FM', primarily entertainment based. FM 96 is 'National Radio', which also broadcasts on 3 AM frequencies, covering most of Western Cambodia. FM 103 is Phnom Penh Municipal Radio<sup>5</sup>. FM 102 in Phnom Penh and (102.2 in Kampong Thom) is operated by the Women's Media Centre, broadcasting a mix of news, culture and message-oriented radio. Bayon, Sweet FM and National Radio also broadcast on other frequencies varying by province. It is likely that some respondents may have cited the radio name rather than the specific frequency. (See Annex 2 for transmitter maps.)

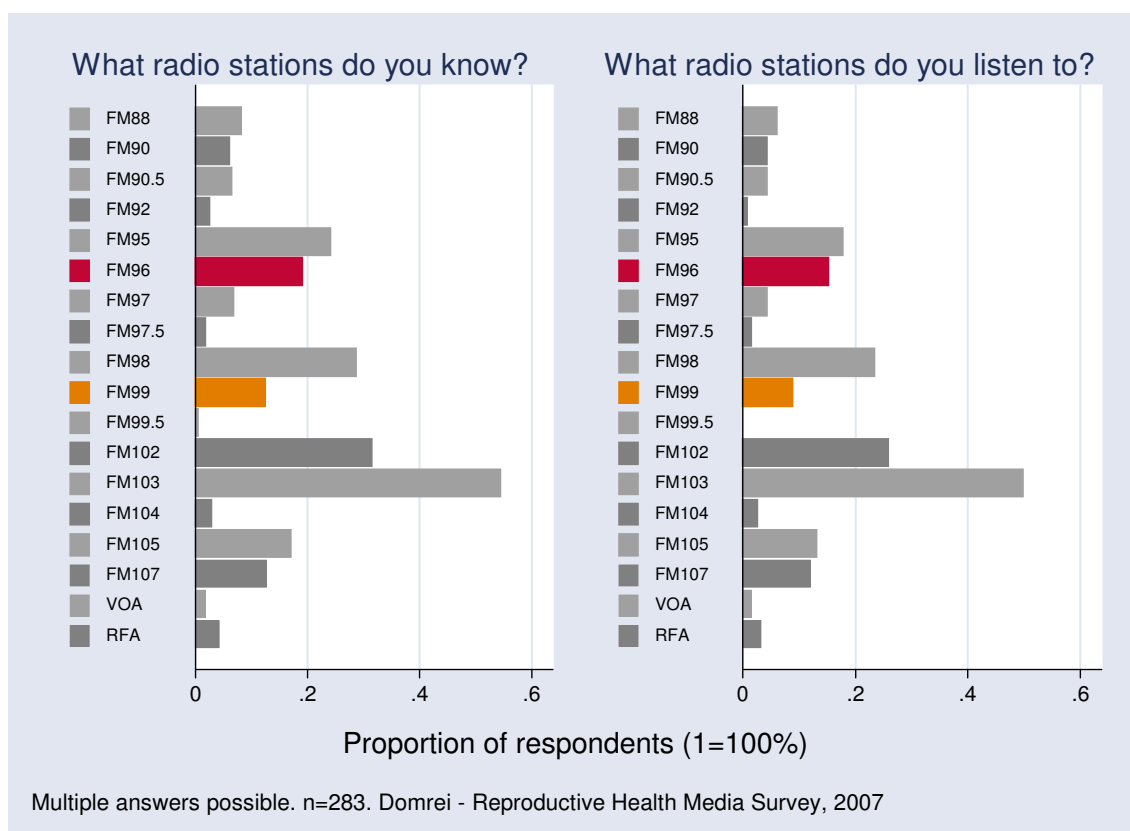
Provincial radio stations also have a respectable rate of listenership in the border provinces, more popular in some places than internationally targeted programming from Radio Free Asia and Voice of America.

Radio listenership is slightly more concentrated in the four central provinces, partly because they are geographically concentrated around Phnom Penh (Figure 10<sup>6</sup>)

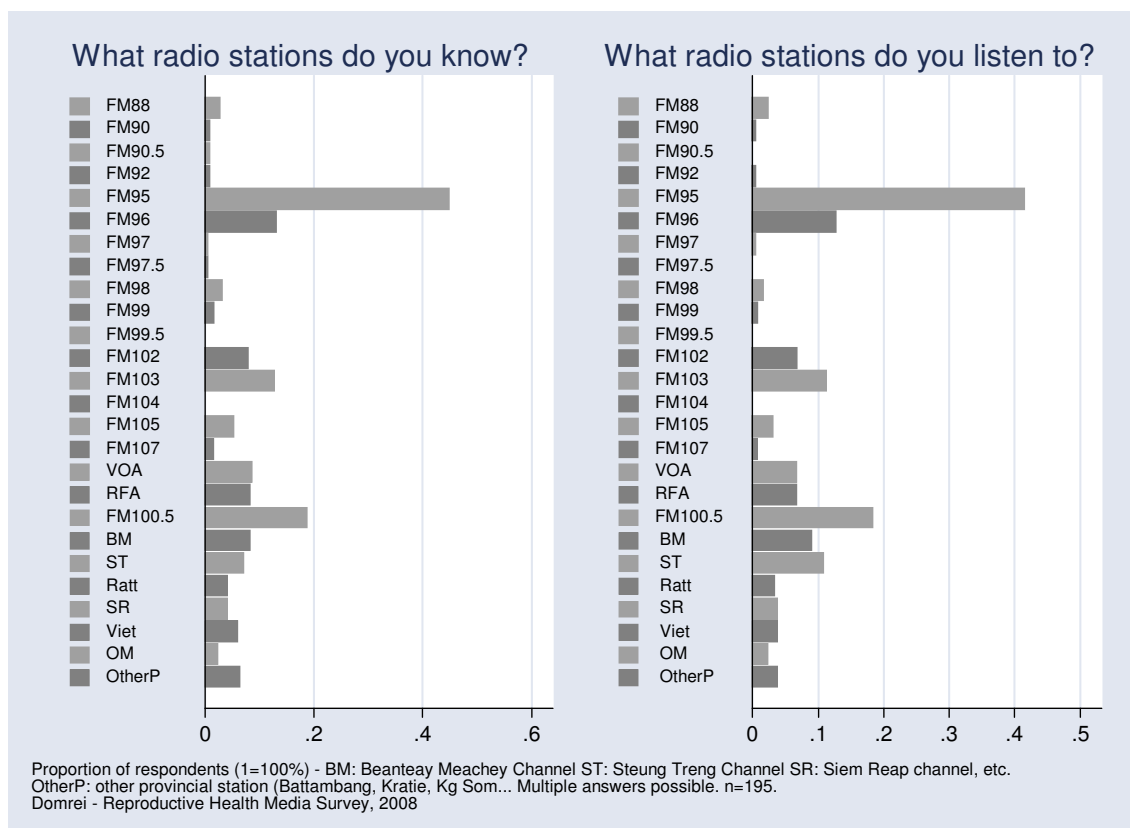
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<sup>5</sup> Also a provincial re-broadcasting frequency for 'Sweet FM'.

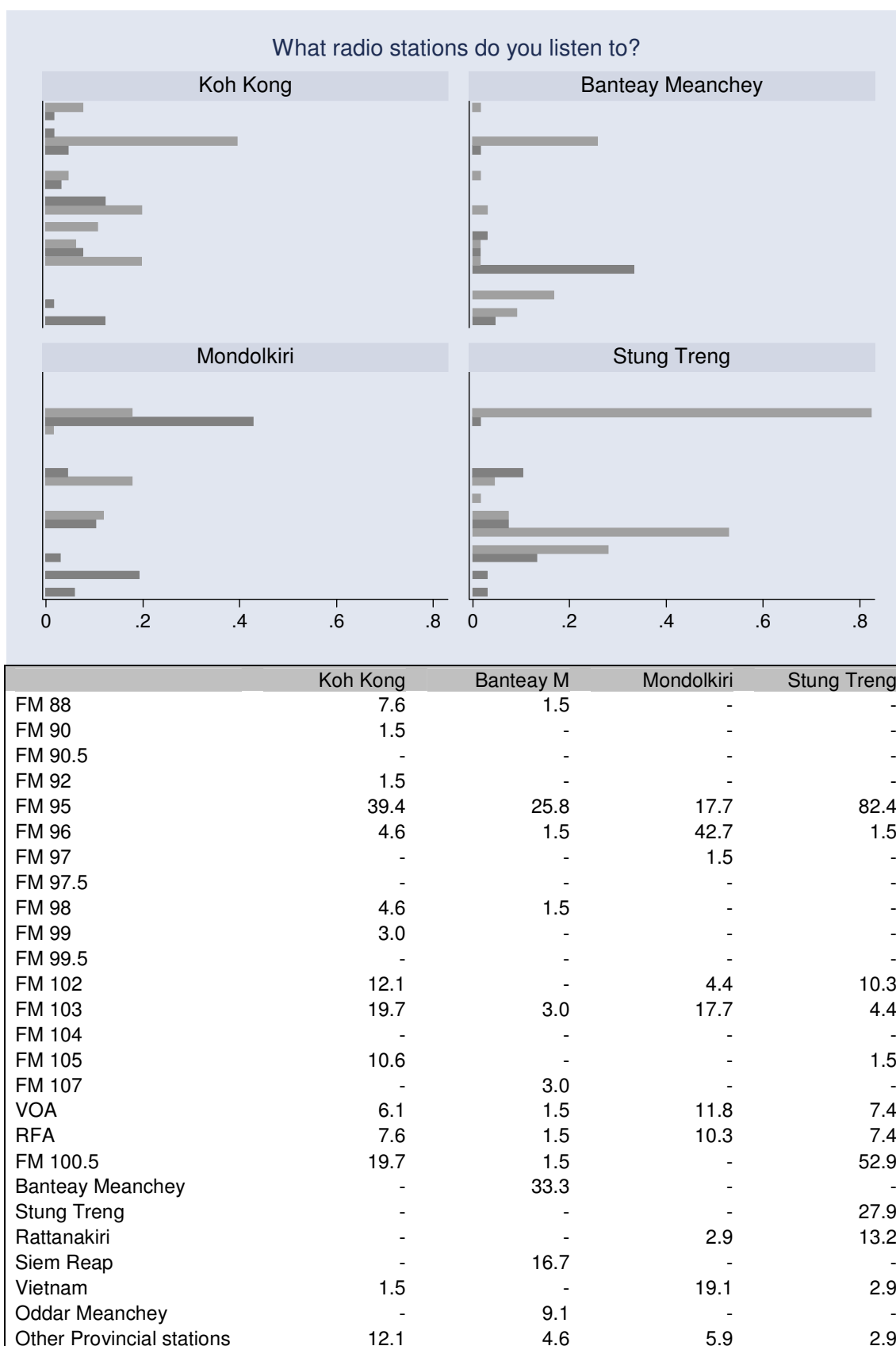
<sup>6</sup> Colour bars and pie slices represent the stations that broadcast phase 1 spots.



**Figure 10: Radio station recognition and listening, central provinces**

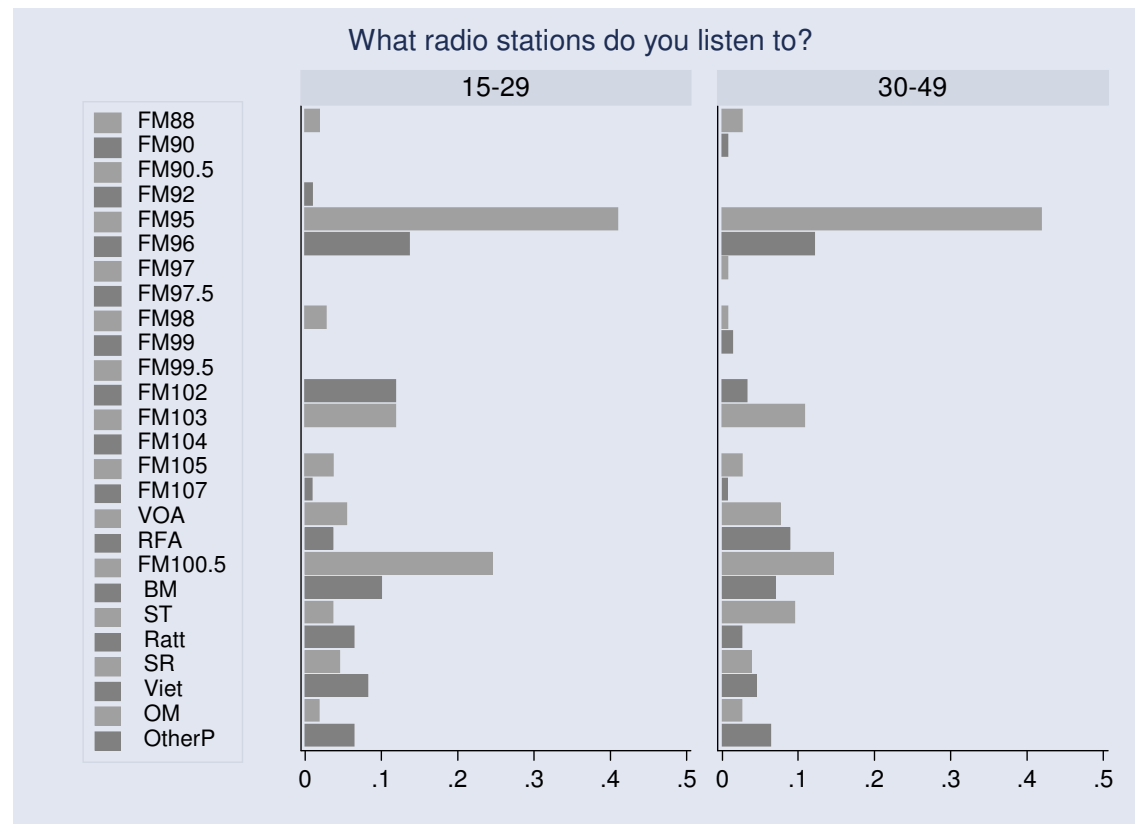


**Figure 11: Radio station recognition and listening, border provinces**



**Figure 12: Radio station listening by province, border provinces**

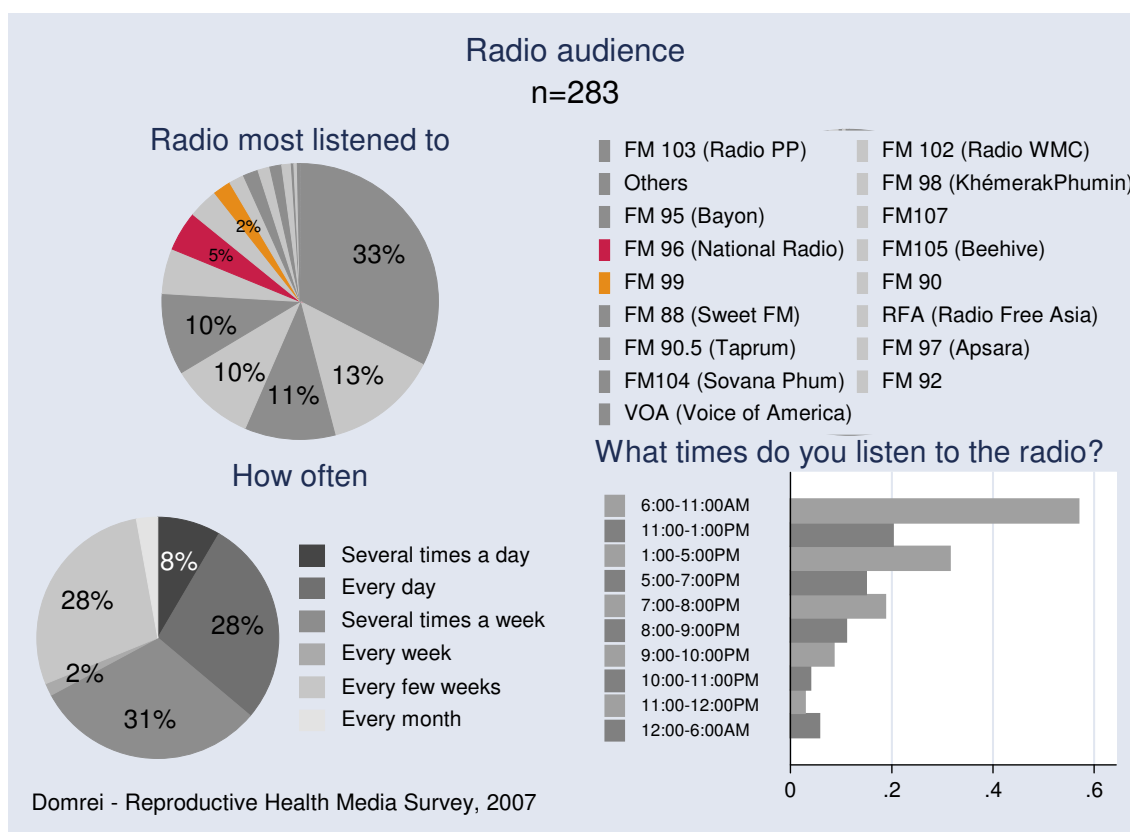
Border provinces: Radio listeners choose their stations with a high degree of provincial variance (Figure 12). Radio listening varies quite strongly, with one consistent similarity: local radio stations are popular in their respective provinces (for estimated geographical reach of popular radio stations, see Annex 2)



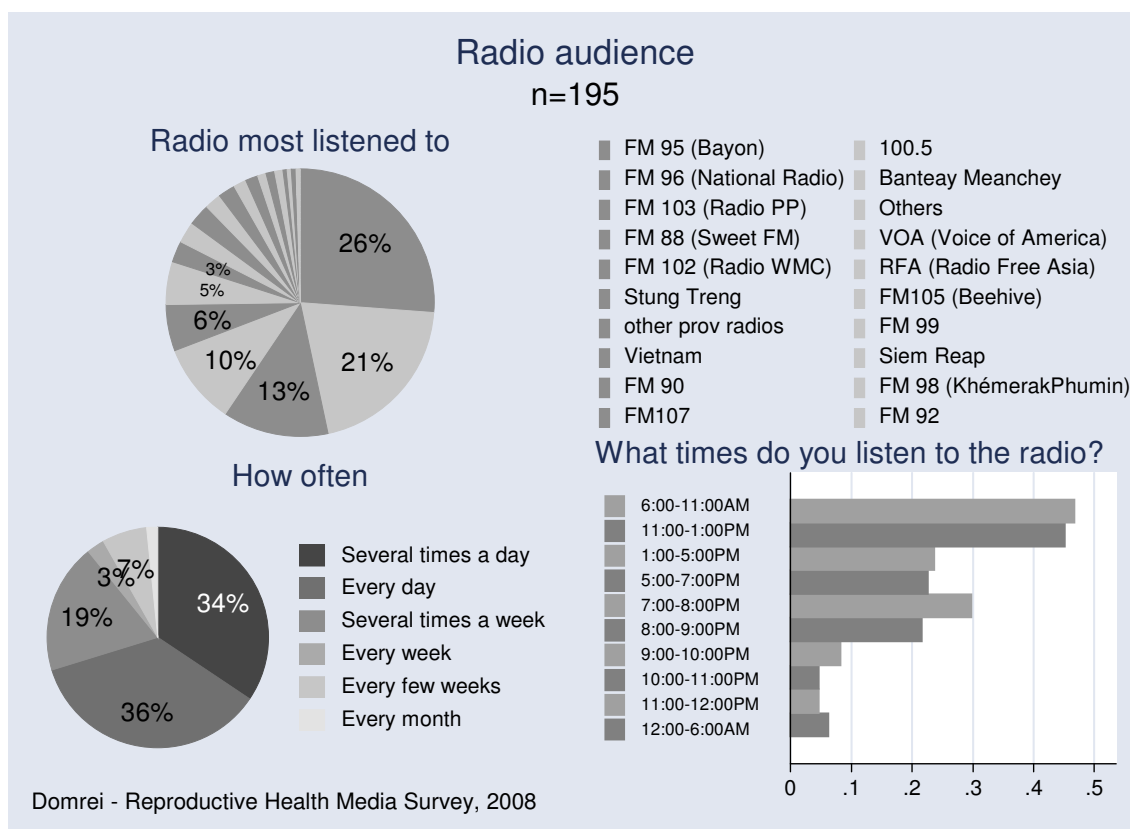
**Figure 13: Radio station listening by age, border provinces**

Border provinces: For both older and younger women of child bearing age, ‘Bayon’ radio (FM 95, FM 93) is the most popular station. National Radio (FM 96, 918 AM, 999 AM, 1255 AM) is the second most popular across both age ranges. The entertainment of ‘Sweet FM’ (88 FM, 93.25 FM, 99 FM, 100.5 FM, 103.25 FM, 103.75 FM) is the third most popular and favoured 10% more highly by younger women – the highest overall statistical variance. Phnom Penh Municipal radio (FM 103) is the fourth choice for older women. Younger women listen to FM 103 and FM 102 (Women’s Media Centre) in near-equal numbers. Beyond this, local stations (Banteay Meanchey for younger women, Stung Treng for older women) are more popular than international broadcasts from Radio Free Asia (RFA) and Voice of America (VOA).

Border provinces: Differences in station recognition between the two age groups were statistically significant at 95% only for Sweet FM 100.5 and Women’s Media Centre FM102. In both cases, they were more popular among 15-29 year olds than 30-45 year olds.

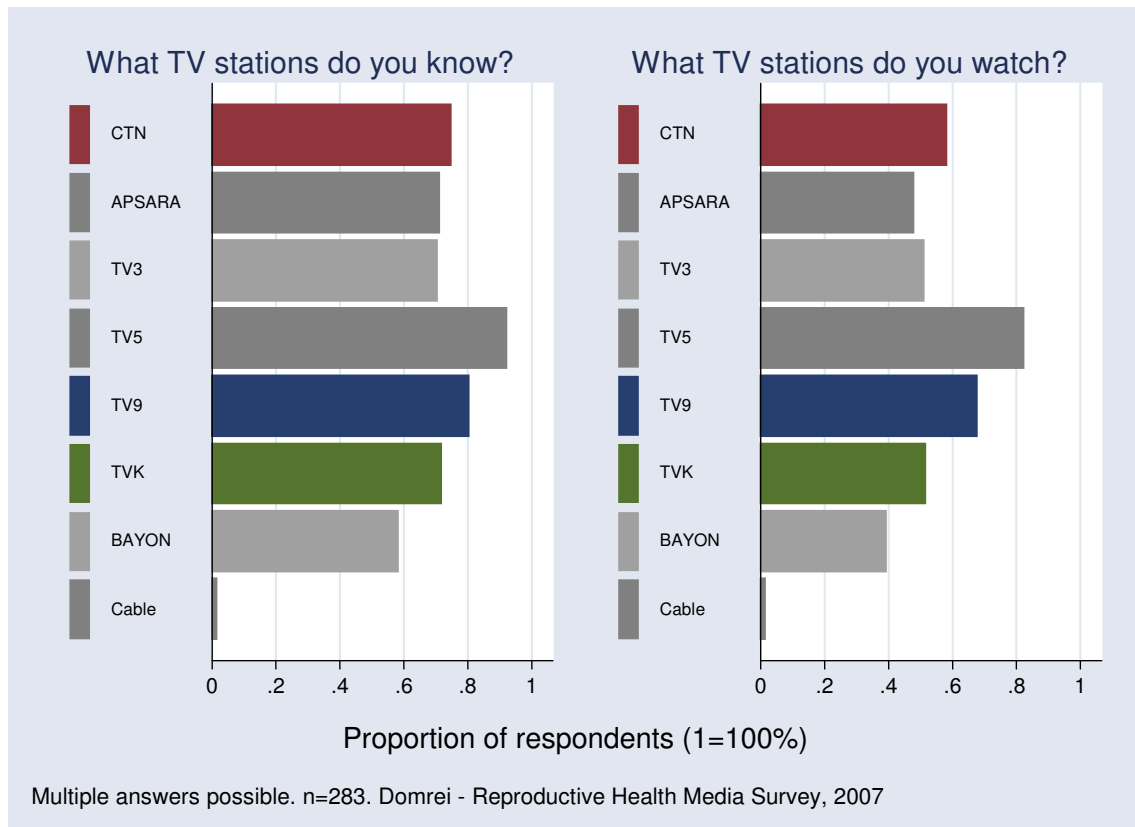


**Figure 14: Radio listening habits, central provinces**

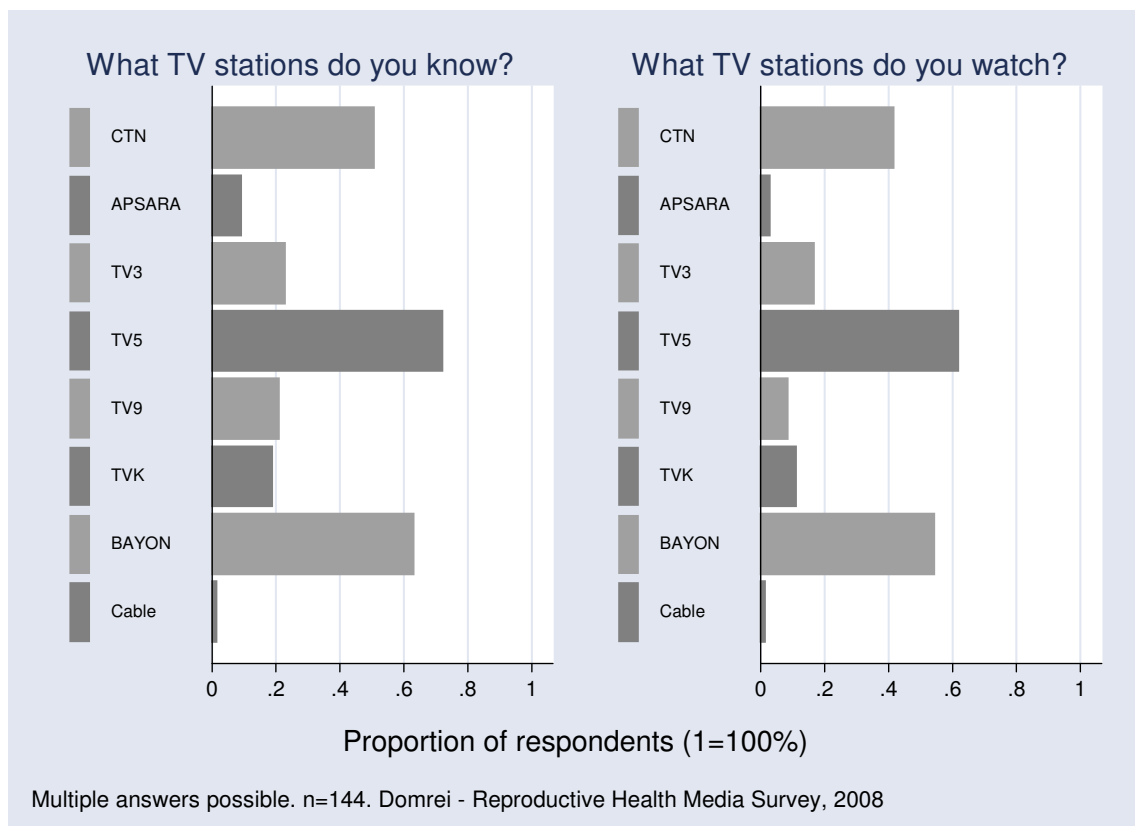


**Figure 15: Radio listening habits, border provinces**

## Television



**Figure 16: Television station recognition and viewing, central provinces**

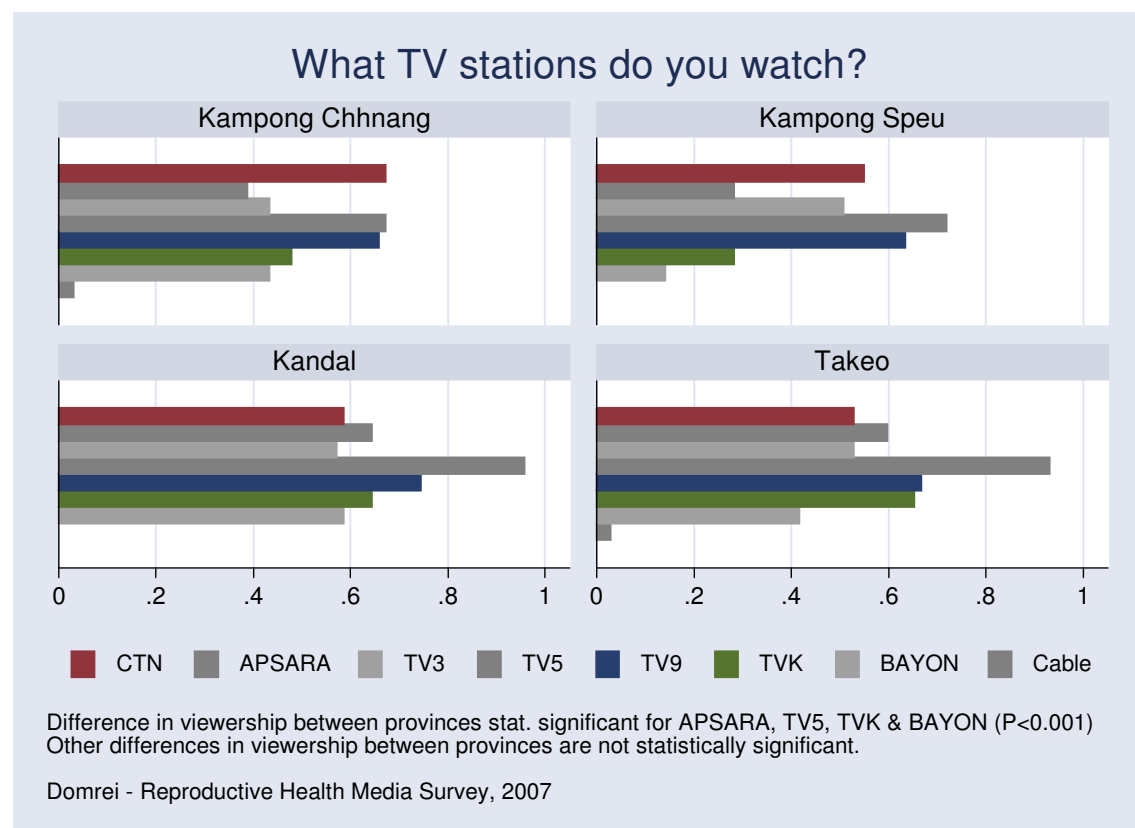


**Figure 17: Television station recognition and viewing, border provinces**

In the border provinces, less than half of our respondents' households (41 percent) own a TV. This proportion is much smaller than in the central provinces (74 percent). As a result, viewing rates are lower in the border provinces. Television viewing patterns are less diverse than radio listening, as there are seven main channels broadcasting. While cable viewing is growing in Cambodia and offers a higher diversity of channels, it was rarely found in the eight provinces. Most popular is TV5, Bayon TV (border provinces) and CTN.

As with radio, viewing habits in the border provinces vary widely by province, but the differences are more limited due to the small number of stations. For example, almost two thirds of women in Banteay Meanchey watch CTN, against 12 percent in Koh Kong, and fewer than 10 percent in Mondolkiri and Stung Treng (Table 2). Provincial differences in channel preferences are less marked in the central provinces (Figure 18).

While younger women in border provinces are more likely to know APSARA, CTN and TV9 than older women are, there are no statistically significant differences in viewing between the two age groups.

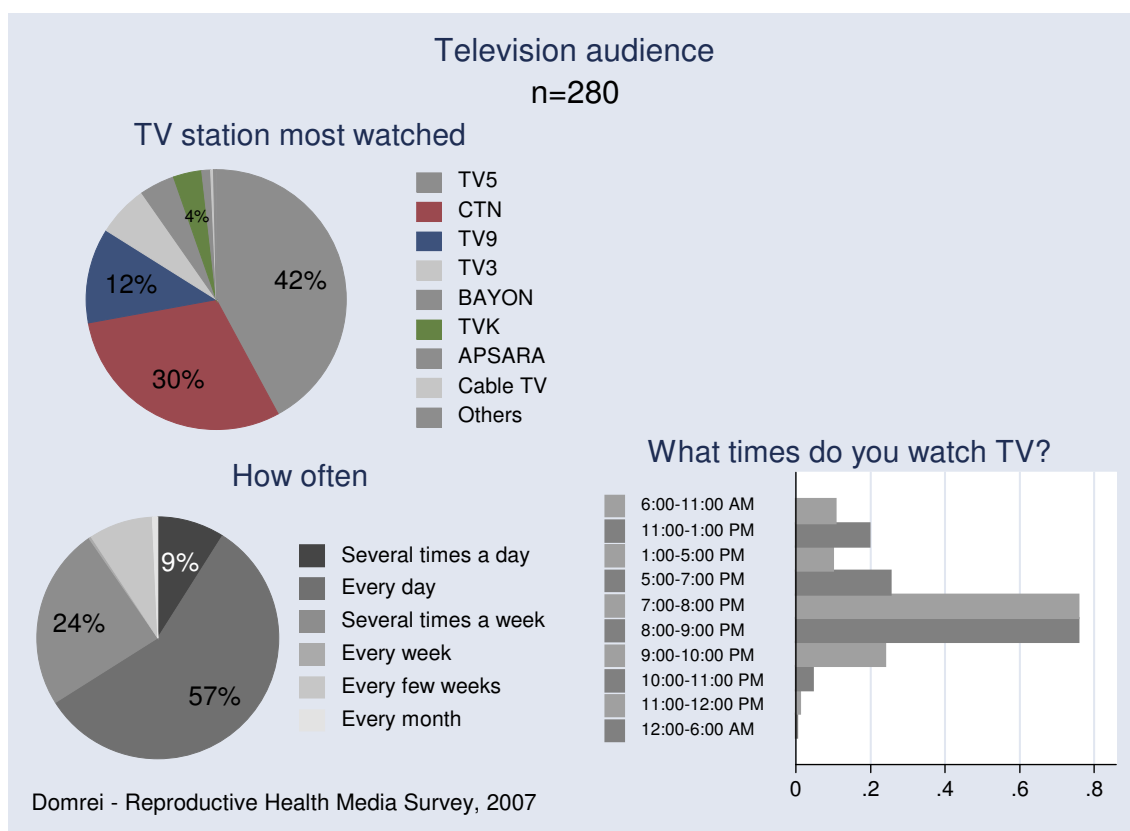


**Figure 18: Differences in television viewing between provinces, central provinces**

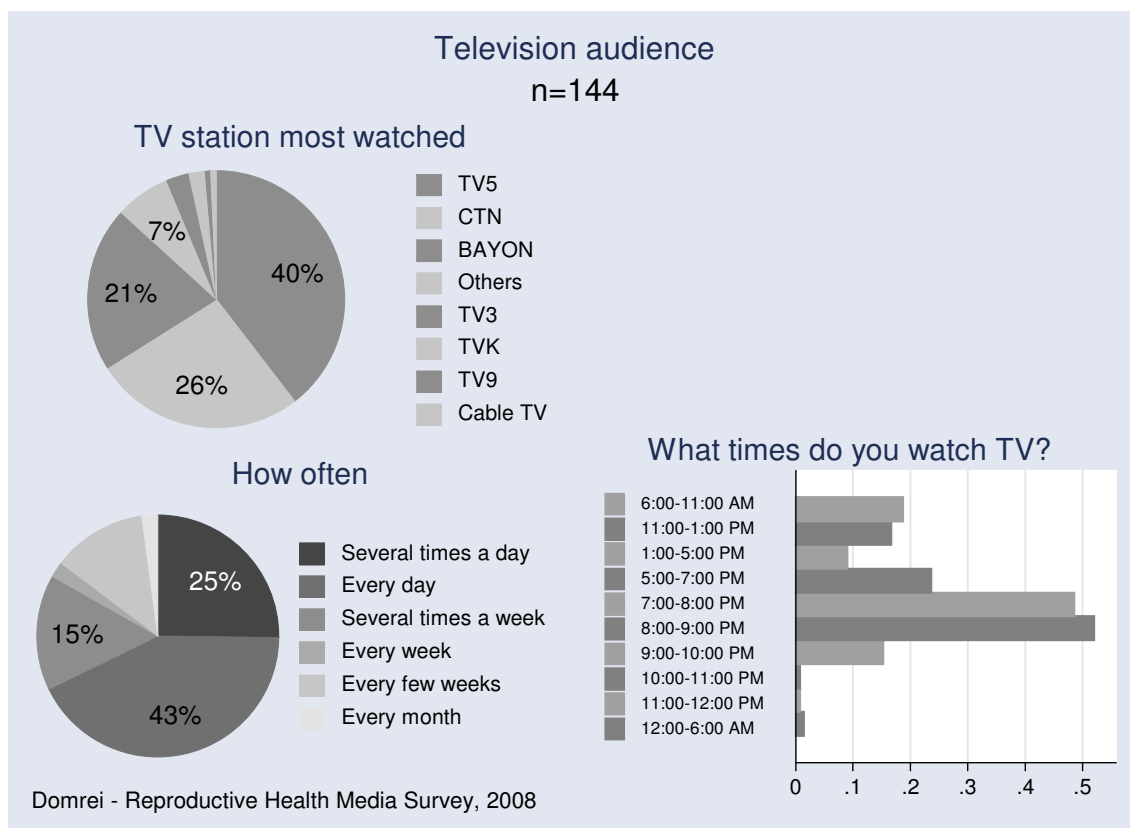


**Table 2: TV station audience, by province – border provinces**

	Koh Kong		Banteay Meanchey		Mondolkiri		Stung Treng	
	n	%	n	%	n	%	n	%
Total	66	100.0	66	100.0	68	100.0	68	100.0
Watches TV	41	62.1	58	87.9	15	22.1	30	44.1
Knows:								
CTN	11	16.7	49	74.2	6	8.8	7	10.3
APSARA	7	10.6	0	-	4	5.9	2	2.9
TV3	26	39.4	4	6.1	2	2.9	1	1.5
TV5	39	59.1	56	84.8	6	8.8	3	4.4
TV9	10	15.2	18	27.3	1	1.5	1	1.5
TVK	21	31.8	2	3.0	2	2.9	2	2.9
BAYON	6	9.1	51	77.3	5	7.4	29	42.6
Cable TV	0	-	1	1.5	0	-	1	1.5
Other	1	1.5	5	7.6	8	11.8	1	1.5
Watches:								
CTN	8	12.1	43	65.2	5	7.4	4	5.9
APSARA	2	3.0	0	-	1	1.5	1	1.5
TV3	21	31.8	1	1.5	2	2.9	0	-
TV5	37	56.1	46	69.7	5	7.4	1	1.5
TV9	4	6.1	7	10.6	0	-	1	1.5
TVK	12	18.2	1	1.5	1	1.5	2	2.9
BAYON	4	6.1	42	63.6	4	5.9	28	41.2
Cable TV	0	-	1	1.5	0	-	1	1.5
Other	0	-	3	4.5	8	11.8	1	1.5



**Figure 19: Television viewing habits, central provinces**



**Figure 20: Television viewing habits, border provinces**

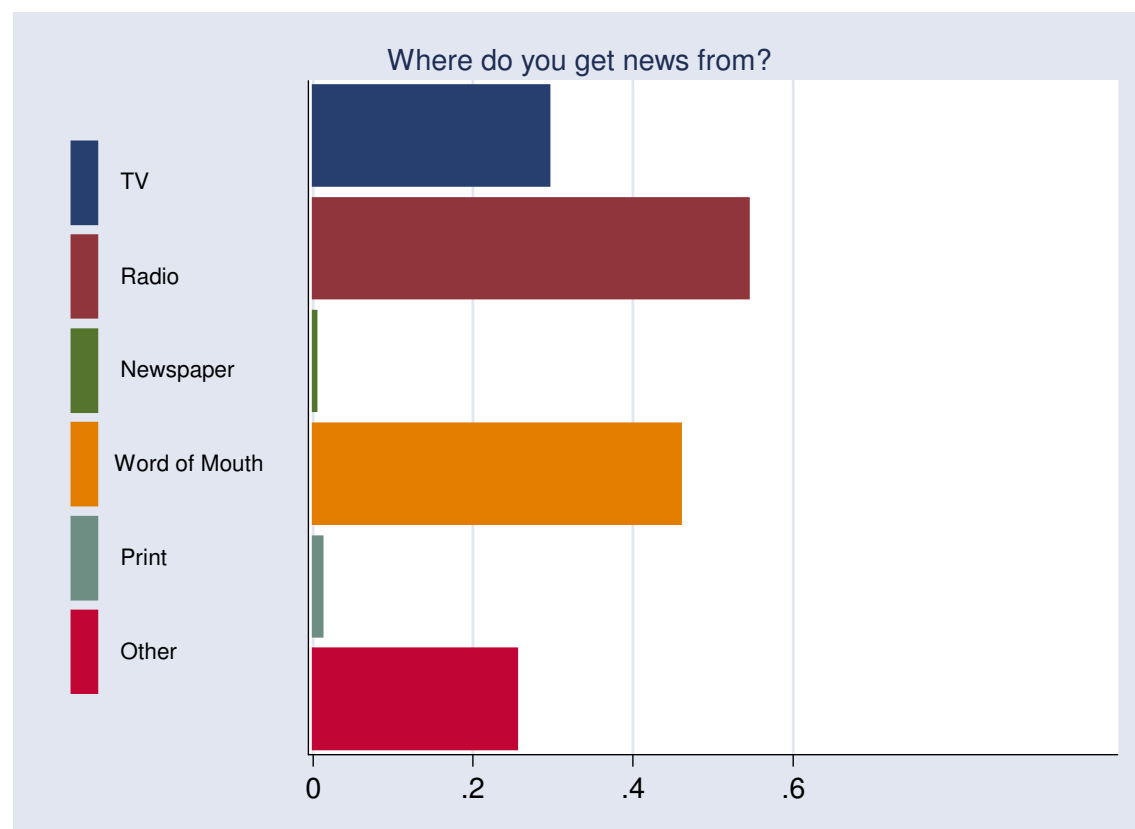
Radio and television habits are different. One reason is that fewer households own televisions than radios. In the border provinces, women listen to radio more often than watch TV. One third of respondents listen to the radio at least once a day (Figure 15 page 21), compared to one quarter who watch television at least once a day (Figure 20).

There are more radio stations than television channels, so the radio audience is more dispersed than the television audience is. Three TV channels (TV5, CTN and Bayon) have a combined market share of 87 percent in the four border provinces, while the four most popular radio stations (FM 95, FM 100.5, FM 96 and FM 103) have a combined market share of 70 percent (Figure 15 page 21).

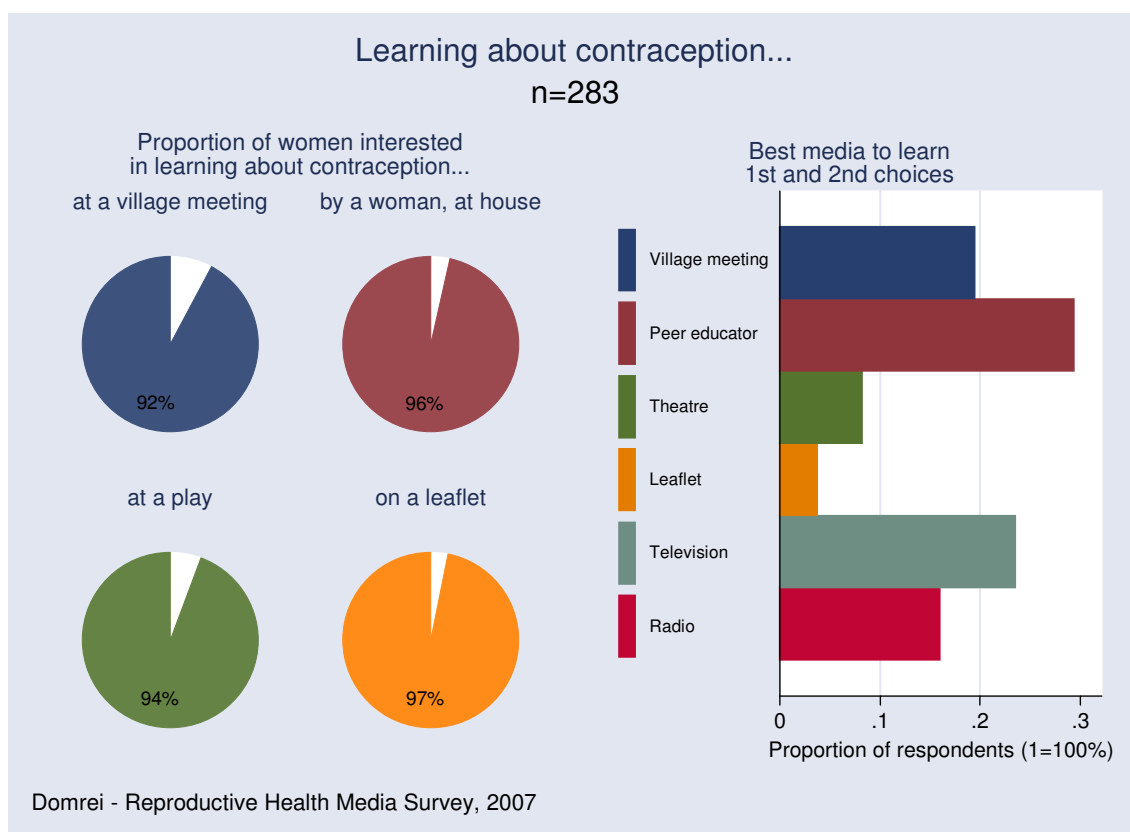
Radio and television audience patterns vary by time of day. Women listen to the radio most frequently in the morning, mostly between 6:00 and 11:00 AM, gradually tapering off as the day grows later. Television viewing is concentrated in the evening, primarily between 7:00 and 9:00 PM.

### **Media ranking**

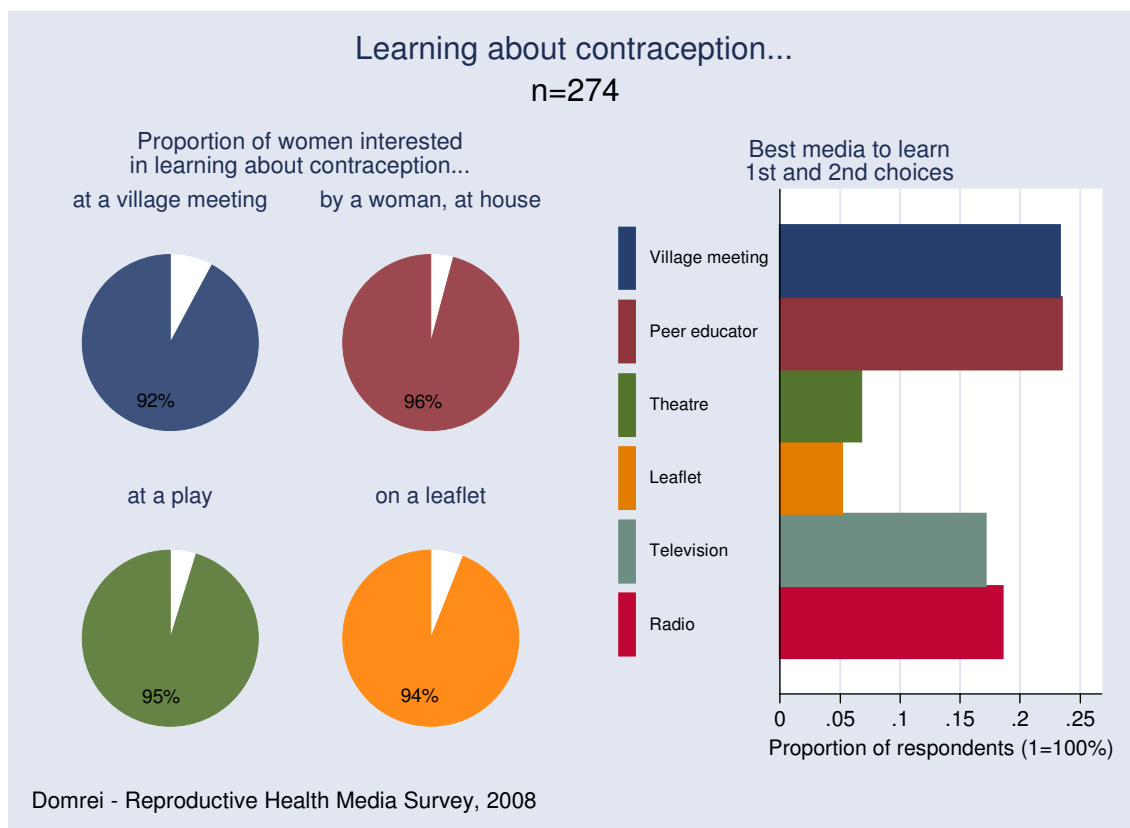
In 2008, interviewers asked respondents how they prefer to get news. Respondents chose radio and word of mouth first, with TV trailing behind. Notably, their first three choices were oral means, with print barely mentioned.



**Figure 21: Communication preferences, border provinces**



**Figure 22: Preference for media types, central provinces**



**Figure 23: Preference for media types, border provinces**

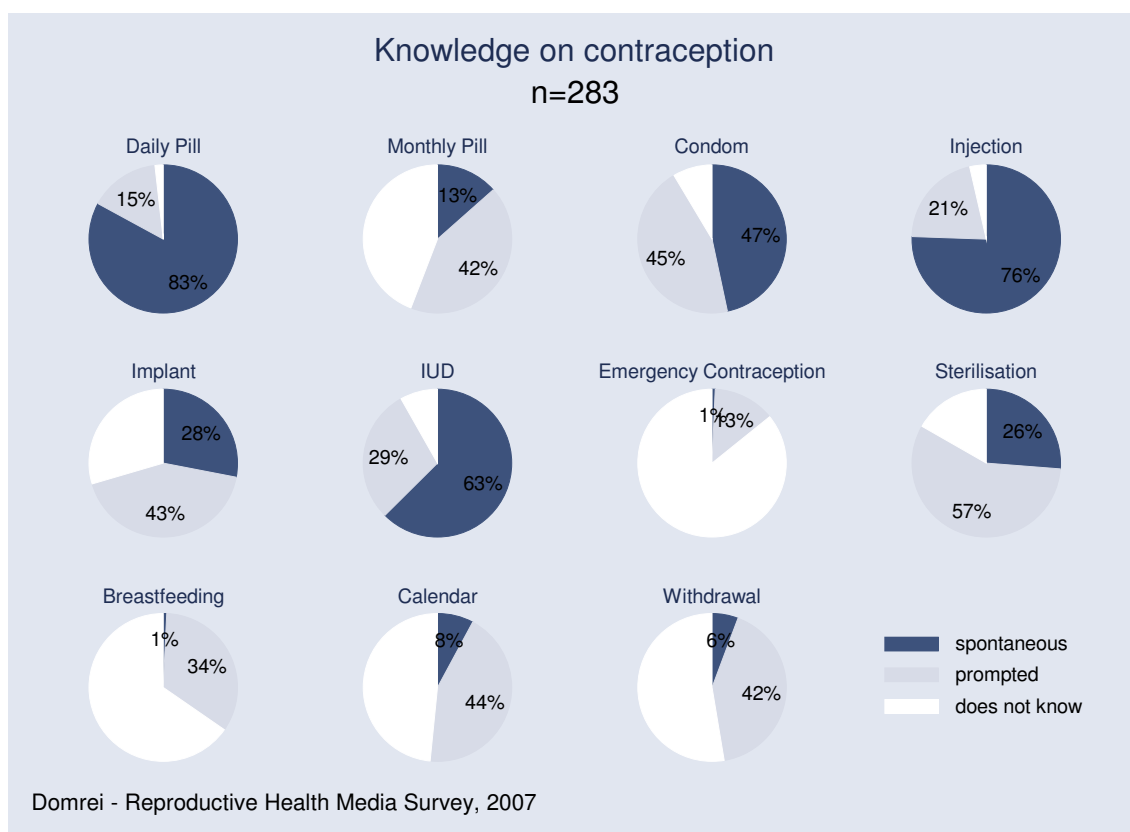
Interviewers asked the respondents if they were interested in learning about contraception (1) at a village meeting, (2) from a woman coming to her house, (3) by watching a play (4) by receiving an information leaflet. Over 90 percent were interested in all four methods, the most popular method were peer educators and village meetings – perhaps due to the fact that only 7% of the respondents are fully literate (see left panel in Figure 5 page 14). Regardless of literacy, a leaflet garnered 94% of respondents' interest.

The survey team then compared radio and television with other media that can be used to promote contraception: village meetings, peer educators and theatre. Interviewers gave the respondents six cards, each card representing one type of media. The interviewer asked the respondents which type of media was the best way for her to learn, the second best way, etc until the respondent handed back the last card. (See right-hand bar chart above.)

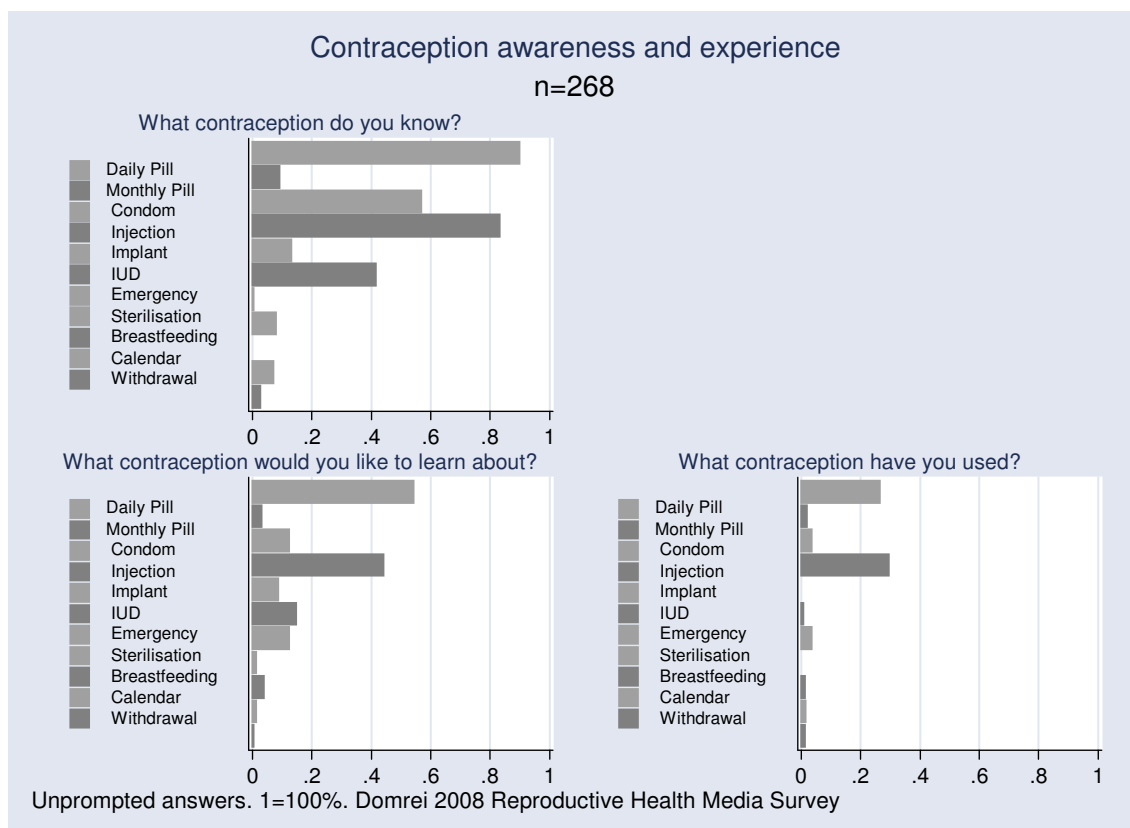
As Figure 22 shows, women in the central provinces prefer peer educators to any other method. When given a wider range of choices, village meetings and radio are also prominent in all eight provinces.

### ***Knowledge and awareness on contraception***

In 2008, interviewers asked respondents to name the contraceptive methods they have heard of. We thus report spontaneous knowledge on contraception (Figure 25). In 2007, Interviewers asked respondents to name the contraceptive methods they have heard of to capture spontaneous knowledge, and then read the names and descriptions of the methods that respondents did not mention spontaneously, and asked if they had heard of them. If women answered yes, then prompted knowledge was also recorded. The pie charts in Figure 24 show, for each method, the proportion of respondents in the central provinces who mentioned the method spontaneously (dark blue), the proportion of respondents who said they heard of the method when prompted (light blue) and the proportion of respondents who, despite prompting, said they never heard of the method (white).



**Figure 24: Spontaneous and prompted contraceptive knowledge, central provinces.**



**Figure 25: Spontaneous knowledge and experience of contraception, border provinces**

In the eight provinces – as in the rest of the country, the daily pill and injections are the most well known and most used of all contraceptive methods. In the border provinces, respondents were also most interested in learning about the pill and injections<sup>7</sup>. They want more information on both these methods. While condom awareness (57 percent) and use were relatively high, there was a much smaller number requesting additional information about this method. The third method that respondents were most interested in was the IUD (15 percent), despite its low rate of use. Interest in different methods varied widely. However, respondents desired information about all methods. There is strong demand for more detailed information on modern contraception.

With the exception of implants, there are no statistically significant differences between age groups in awareness of different methods in the border provinces. Implants were better known among older women (16 percent) than younger women (eight percent).

A higher proportion of older women in the border provinces want to learn more about the IUD (18 percent against nine percent) and implants (11 percent against five percent). Not surprisingly, older women were also twice more likely to have tried the daily pill and injections than younger women.

### ***Rural outreach***

In 2008, we asked several questions to capture women's preferences in terms of humour and types of actors in contraceptive promotion.

Over 90 percent of women from all four border provinces say humour in BCC material on contraception is appropriate (no statistically significant differences between ages). Younger women preferred younger actors, older women preferred actors thirty years and older (Differences statistically significant).

**Table 3: Use of humour in contraception information**

	Appropriate		Not appropriate		Total	
	n	%	n	%	n	%
<b>Age</b>						
15-29	99	90.0	11	10.0	110	100.0
30-45	147	94.8	8	5.2	155	100.0
<b>Province</b>						
Koh Kong	56	88.9	7	11.1	63	100.0
Banteay Meanchey	63	95.5	3	4.5	66	100.0
Mondolkiri	63	92.6	5	7.4	68	100.0
Stung Treng	64	94.1	4	5.9	68	100.0

<sup>7</sup> Questions not asked in the 2007 survey. The results only concern the four border provinces.

**Table 4: Preferred age range of actors in BCC material**

	20 years old		30 years old		Total	
	n	%	n	%	n	%
<b>age</b>						
15-29	59	53.6	51	46.4	110	100.0
30-45	64	41.0	92	59.0	156	100.0
<b>Province</b>						
Koh Kong	35	54.7	29	45.3	64	100.0
Banteay Meanchey	27	40.9	39	59.1	66	100.0
Mondolkiri	23	33.8	45	66.2	68	100.0
Stung Treng	38	55.9	30	44.1	68	100.0

## Discussion and conclusion

The most popular radio stations in the four border provinces are FM 95, FM 100.5, FM 96 and FM 103. The most popular TV stations are Bayon TV, TV5 and CTN. Campaign coverage can be strengthened if radio and TV stations and times are chosen according to the data presented above.

Also, worth consideration for rural provinces are alternative vehicles for outreach, like public events, village meetings and peer education. Interest and demand for information is demonstrably high, but not all details (side effects, technical details) can be covered in short TV and radio spots. Alternative methods of BCC can be explored and deployed to empower rural women to make informed choices about contraception. Ideally, radio, TV, leaflets and community outreach should overlap, sharing similar themes and images. Printed material is more appropriate for technical information on how contraceptive methods work, their advantages and limitations. While low literacy rates among rural women are an obstacle, this can be overcome by involving literate village volunteers who can also use the leaflets as reference material.

## Recommendations

1. Select broadcast channels and schedules based on a more detailed analysis of the Media Habits Survey and the Impact Survey.
2. Develop media profiles for Campaign Phase II target groups of women such as higher parity, differing age groups, differing literacy and socio-economic status.
3. Use these profiles to develop a broad-based multimedia campaign (Radio, TV, Web, phone, print, rural shows, etc.) that fulfils the MoH's goals while addressing women's quantitative and qualitative survey responses.
4. Due to diverse media habits, coordinate with other organisations conducting outreach to insure there is no overlap and that messages are complementary.
5. Plan for increased demand for contraception and make provider information easily accessible to those with limited or no literacy.



## **Annexes**

### ***Annex 1 Radio stations***

[Alphabetical order, including rebroadcast frequencies as per radio maps]

#### **FM Radio**

Banteay Meanchey Municipal Radio  
Bayon FM 93  
Radio Bayon FM 95  
Kampong Cham Provincial Radio 92.5 FM  
Kompong Thom Provincial Radio 107.3  
Pailin Municipal Radio 90.5  
Pursat Provincial Radio 98.5  
Radio Australia 101.5  
Battambang Provincial Radio 96.1  
Bayon FM 93  
BBC 100 FM Phnom Penh  
BBC Siem Reap 99.25  
FM 95.5 Phnom Penh  
FM 99 Phnom Penh  
Hot Wave 98 FM Siem Reap  
Hot Wave FM 98 Khmerak Phomin  
Kampong Cham Provincial Radio 92.5 FM  
Khmer FM 107 Phnom Penh  
Kompong Thom Provincial Radio 107.3  
Krusa FM 99.5 Phnom Penh  
Love FM 97.5 Phnom Penh  
Municipal Radio FM 103 Phnom Penh  
National Radio 96 FM  
Planet 97 FM Radio Apsara Phnom Penh  
Pursat Provincial Radio 98.5  
Radio Australia 101.5  
Radio Beehive FM 105 Phnom Penh  
Radio FM 102 Phnom Penh  
Radio FM 90 Phnom Penh  
Radio FM Khemera 91 Battambang  
Radio Free Asia  
Radio Khlaing Meoung 90.25 Battambang  
Radio Sovann Phum FM 104 Phnom Penh  
Radio Star FM 106.5 Phnom Penh  
Sathani Vithayu Krom FM 102.5 Siem Reap  
Sweet FM 100.5 Kompong Cham  
Sweet FM other frequencies  
Ta Phrom Radio FM 90.5  
Voice of New Life FM 89.5  
Women's Media Centre FM 102.2

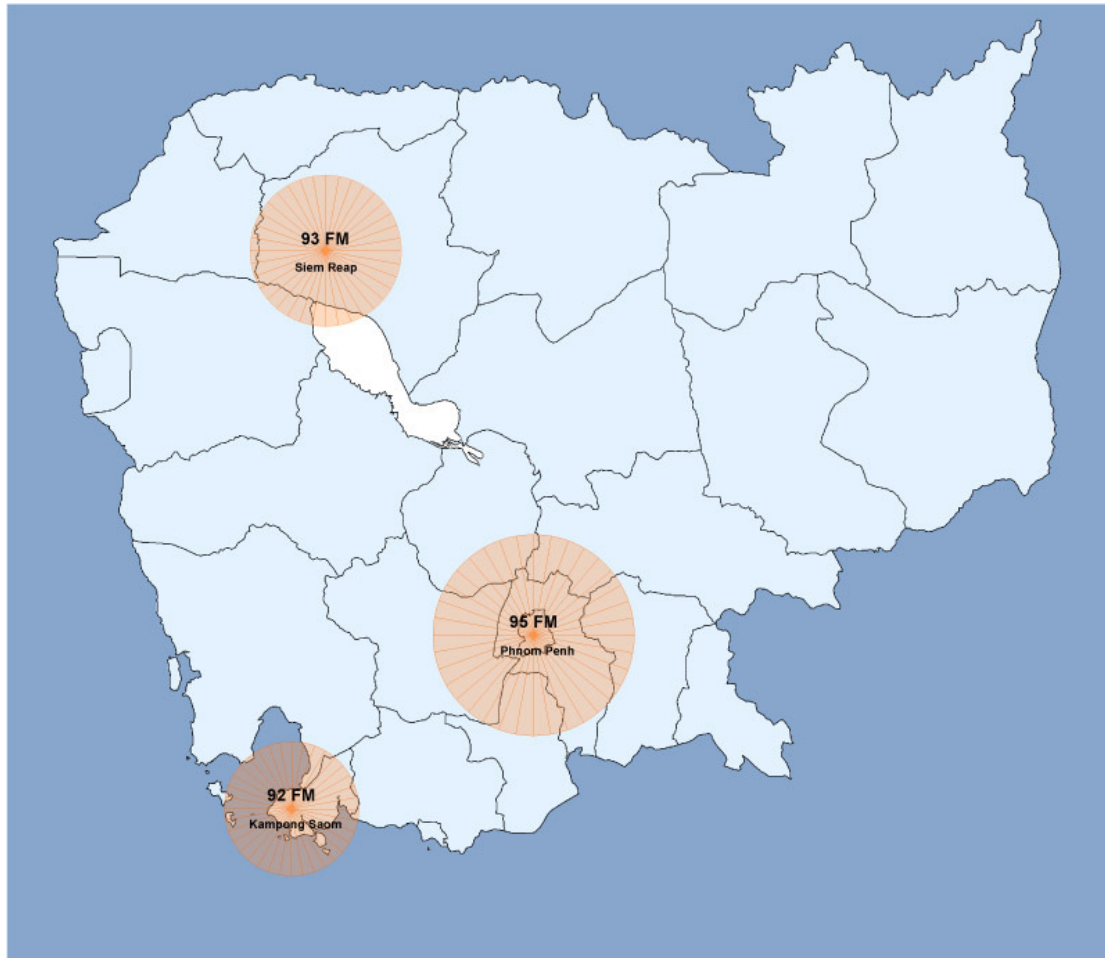
#### **AM Radio**

National Radio AM

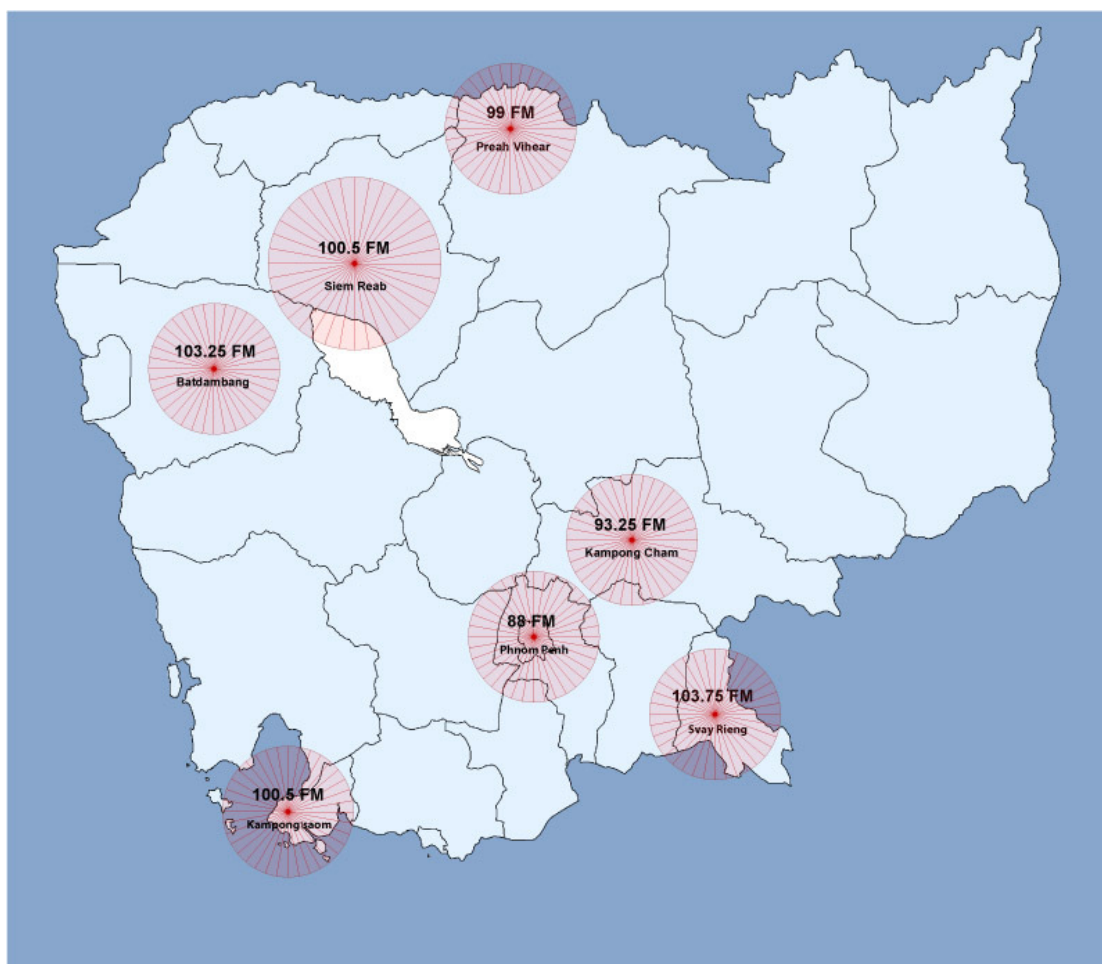
## ***Annex 2 Selected radio station networks***

Maps are adapted from [www.fmscan.org](http://www.fmscan.org) and are included for general reference. They may not include all rebroadcasting stations for large networks.

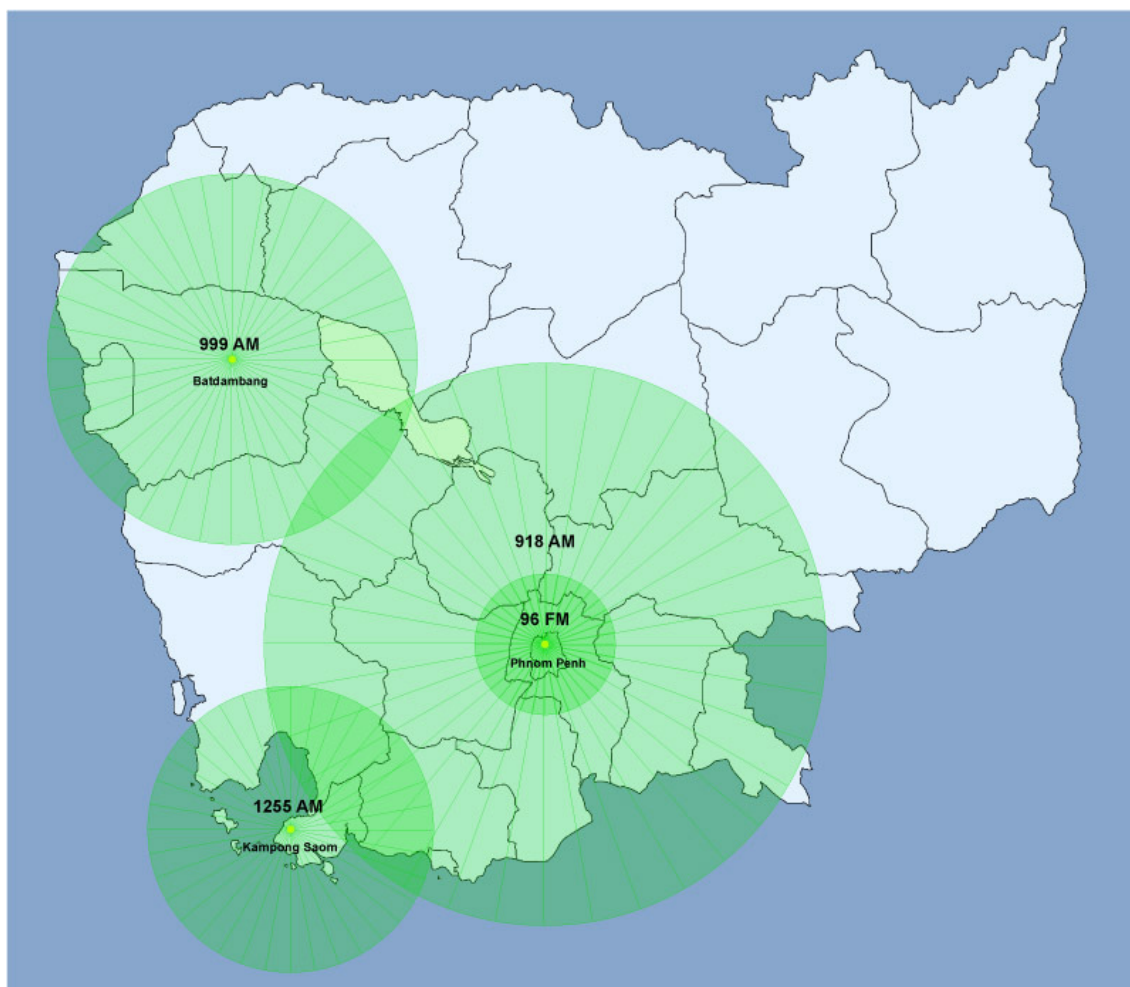
### **Bayon Radio**



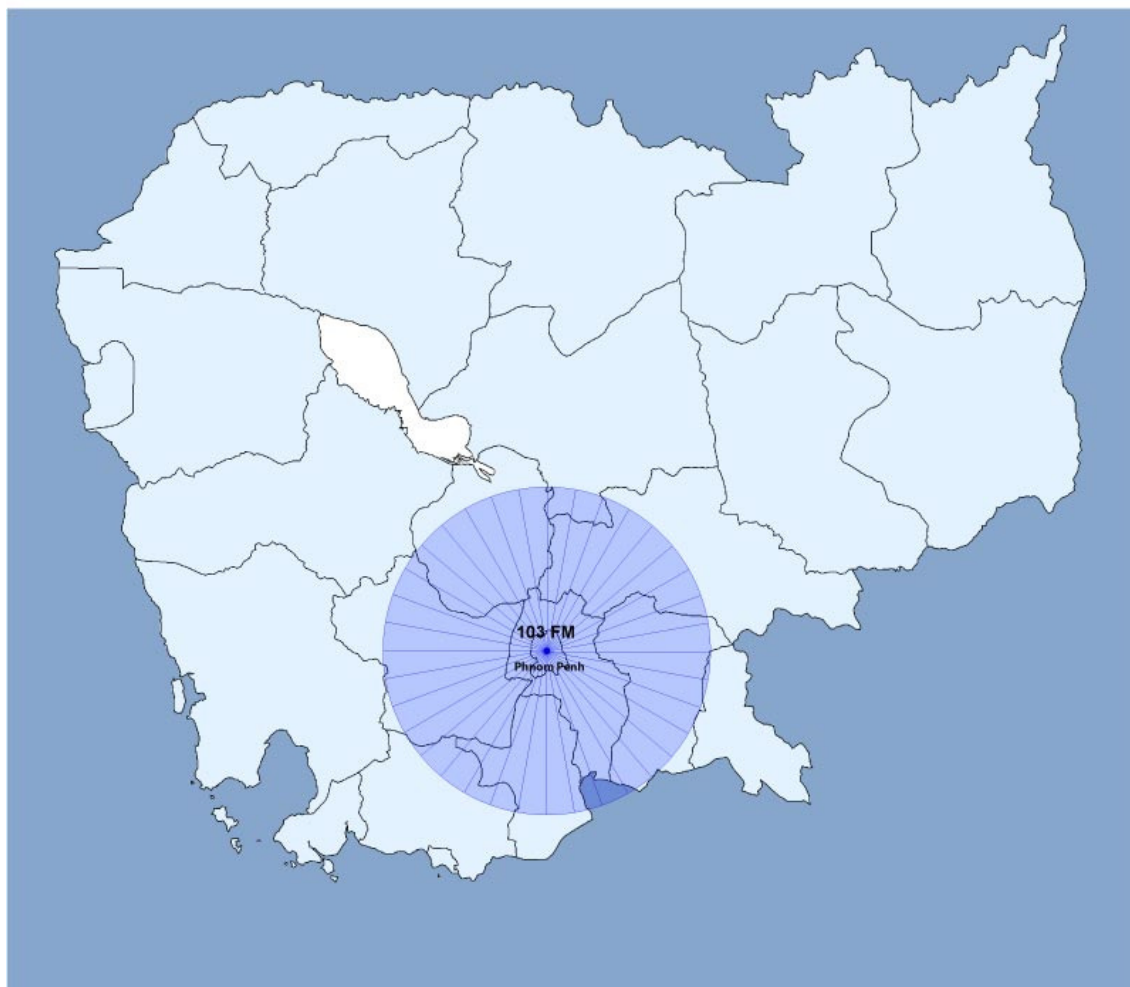
## Sweet FM



## National Radio



## Municipal Radio



Annex 3 2008 Survey questionnaire

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Province : _____	<table border="1"><tr><td></td><td></td></tr></table>		
District : _____	<table border="1"><tr><td></td><td></td></tr></table>		
Commune: _____	<table border="1"><tr><td></td><td></td></tr></table>		
Village: _____	<table border="1"><tr><td></td><td></td></tr></table>		
Wealth Ranking – Poorest (0) Medium (1) Better-off (2)	<table border="1"><tr><td></td></tr></table>		
House Type – Check your own observation			
Palm/thatch (0) Wood/palm (1) Wood/tin (2) Wood/tile (3) Brick or concrete (4)	<table border="1"><tr><td></td></tr></table>		

	1 <sup>st</sup> attempt	Appointment	2 <sup>nd</sup> attempt						
Date	/ /07	/ /07	/ /07						
Time									
Location									
Interviewer	<table border="1"><tr><td></td><td></td></tr></table>			<table border="1"><tr><td></td><td></td></tr></table>			<table border="1"><tr><td></td><td></td></tr></table>		

Result Codes	
Completed	1
Incomplete-respondent termination	2
Incomplete-third party interruption	3
Respondent refusal	4
Parent/guardian/spouse refusal	5
Respondent absent at 2nd appointment	6

	Interviewer	Editor	Encoder	Archived								
ID code	<table border="1"><tr><td></td><td></td></tr></table>			<table border="1"><tr><td></td><td></td></tr></table>			<table border="1"><tr><td></td><td></td></tr></table>			Box: <table border="1"><tr><td></td><td></td></tr></table>		
Date	/ / 07	/ / 07	/ / 07	/ / 07								
Signature												

## Introduction:

I want to remind you that all your answers are very important. It isn't a test, so there are no wrong answers. Therefore, I want to ask you to answer truthfully. This will allow my team to give true information to the Ministry of Health to improve the campaign for future.

Can I start asking the questions now?

		Boat	7
		Car/Koyun	8
8	What farm animals do your family own? <i>Prompt by reading the list</i> <i>Multiple answers possible – circle all answers given</i> <i>Check that they do not mind the animals for someone else</i>	Not have	0
		Chicken/ducks	1
		Pigs	2
		Goats	3
		Cows	4
		Horses	5
		Buffalo	6
<b>Section 2 : Mass Media Habits</b>			
<b>I would like to ask you some questions about your media habits</b>			
9	Do you ever listen to the radio?	No (Skip to Q15)	0
		Yes	1
10	What Radio stations do you know? <i>Multiple Answers</i>	FM 88 (Sweet FM)	1
		FM 90.5 (Taprum)	2
		FM 90	3
		FM 92	4
		FM 95 (Bayon)	5
		FM 96 (National Radio)	6
		FM 97 (Apsara)	7
		FM 97.5 (love FM)	8
		FM 98 (KhémerakPhumin)	9
		FM 99	10
		FM 99.5	11
		FM 102 (Radio WMC)	12
		FM 103 (Radio PP)	13
		FM104 (Sovana Phum)	14
		FM105 (Beehive)	15
		FM107	16
		VOA (Voice of America)	17
		RFA (Radio Free Asia)	18
		Others: ...	88
11	What Radio stations do you listen to? <i>Multiple Answers</i>	FM 88 (Sweet FM)	1
		FM 90.5 (Taprum)	2
		FM 90	3



		FM 92	4
		FM 95 (Bayon)	5
		FM 96 (National Radio)	6
		FM 97 (Apsara)	7
		FM 97.5 (Love FM)	8
		FM 98 (KhémerakPhumin)	9
		FM 99	10
		FM 99.5	11
		FM 102 (Radio WMC)	12
		FM 103 (Radio PP)	13
		FM104 (Sovana Phum)	14
		FM105 (Beehive)	15
		FM107	16
		VOA (Voice of America)	17
		RFA (Radio Free Asia)	18
		Others: ...	88
12	Which radio station do you listen to the most?  <b>Mark one only and Check that the answer is consistent with the questions above</b>	FM 88 (Sweet FM)	1
		FM 90.5 (Taprum)	2
		FM 90	3
		FM 92	4
		FM 95 (Bayon)	5
		FM 96 (National Radio)	6
		FM 97 (Apsara)	7
		FM 97.5 (love FM)	8
		FM 98 (KhémerakPhumin)	9
		FM 99	10
		FM 99.5	11
		FM 102 (Radio WMC)	12
		FM 103 (Radio PP)	13
		FM104 (Sovana Phum)	14
		FM105 (Beehive)	15
		FM107	16
		VOA (Voice of America)	17
		RFA (Radio Free Asia)	18




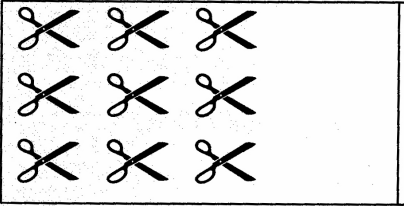
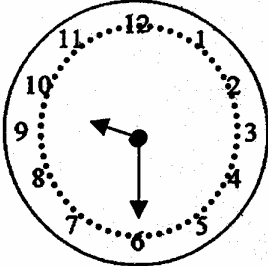
		Others: ...	88
13	Normally, how often do you listen to the radio?  <b>Prompt by reading the answers and asking the respondent to choose one</b>	Several times a day Every day Several times a week Every week Every few weeks Every month	1 2 3 4 5 6
14	What times of day do you listen to the radio?  <b>Multiple answers</b>	6:00 – 11:00 AM 11:00 – 1:00 PM 1:00 – 5:00 PM 5:00 – 7:00 PM 7:00 – 8:00 PM 8:00 – 9:00 PM 9:00 – 10:00 PM 10:00 – 11:00 PM 11:00 – 12:00 PM 12:00 – 6:00 AM	1 2 3 4 5 6 7 8 9 10
15	Do you ever watch television?	No (Skip to Q21) Yes	0 1
16	What television stations do you know?  <b>Multiple answers</b>	CTN APSARA TV3 TV5 TV9 TVK BAYON Cable TV Others:...	1 2 3 4 5 6 7 8 88
17	What television stations do you watch?  <b>Multiple answers</b>	CTN APSARA TV3 TV5 TV9 TVK BAYON Cable TV Others:...	1 2 3 4 5 6 7 8 88
18	Which television station do you watch the most?  <b>Mark one only and Check that the answer is consistent with the</b>	CTN APSARA	1 2

	<i>questions above</i>	TV3	3
		TV5	4
		TV9	5
		TVK	6
		BAYON	7
		Cable TV	8
		Others:...	88
19	Normally, how often do you watch television?  <b>Prompt by reading the answers and asking the respondent to choose one</b>	Several times a day	1
		Every day	2
		Several times a week	3
		Every week	4
		Every few weeks	5
		Every month	6
20	What times of day do you watch television?  <b>Multiple Answers</b>	6:00 – 11:00 AM	1
		11:00 – 1:00 PM	2
		1:00 – 5:00 PM	3
		5:00 – 7:00 PM	4
		7:00 – 8:00 PM	5
		8:00 – 9:00 PM	6
		9:00 – 10:00 PM	7
		10:00 – 11:00 PM	8
		11:00 – 12:00 PM	9
		12:00 – 6:00 AM	10
21	Would you be interested in learning about contraception at a meeting in your village?	No	0
		Yes	1
22	Would you be interested if another woman came to your house to explain about contraception?	No	0
		Yes	1
23	Would you be interested in attending a play that informed you about contraception?	No	0
		Yes	1
24	Would you like to receive a leaflet with information about contraception?	No	0
		Yes	1
<b>Media Ranking –</b> I am going to show you some cards with different types of media that we have just discussed. I want to ask you to rank these types of media.			
Give the respondent the cards all six cards for the media types. Ask them to give you back the card with their answer.			
25	Which media is the best way for you to learn?	Meeting	1
		Peer Ed	2
		Theatre	3
		Leaflet	4

		Television	5
		Radio	6
26	Which media is the second best way for you to learn?	Meeting	1
		Peer Ed	2
		Theatre	3
		Leaflet	4
		Television	5
		Radio	6
27	Which media is the third best way for you to learn?	Meeting	1
		Peer Ed	2
		Theatre	3
		Leaflet	4
		Television	5
		Radio	6
28	Which media is the fourth best way for you to learn?	Meeting	1
		Peer Ed	2
		Theatre	3
		Leaflet	4
		Television	5
		Radio	6
29	Which media is the fifth best way for you to learn?	Meeting	1
		Peer Ed	2
		Theatre	3
		Leaflet	4
		Television	5
		Radio	6
30	Which media is the sixth best way for you to learn?	Meeting	1
		Peer Ed	2
		Theatre	3
		Leaflet	4
		Television	5
		Radio	6
31	Where do you get your news? <b>Multiple Answers</b>	Television	1
		Radio	2
		Newspaper	3
		Word of mouth	4
		Print Media	5
		Other	88
32	Should informative advertisements be humorous or serious?	Humorous	1
		Serious	2
33	What age should the actors be?	Around 30	1
		Around 20	2
34	What is your favourite TV show?		
35	Why?		
36	What is your favourite TV ad?		
37	Why?		
38	What is your favourite TV advertisement?		
39	Why?		
40	What is your favourite radio show?		
41	Why?		
42	What is your least favourite radio advertisement?		

43	Why?	
44	What contraception do you know about? Please let us know what kind you know about.	Daily Pill 1 Monthly Pill 2 Injection 3 IUD 4 Sterilisation 5 Condom 6 Implant 7 Vasectomy 8 Traditional Method 9 Withdrawal 10 Calendar 11 Other 88
45	What methods of contraception would you like to learn about?	Daily Pill 1 Monthly Pill 2 Injection 3 IUD 4 Sterilisation 5 Condom 6 Implant 7 Vasectomy 8 Traditional Method 9 Withdrawal 10 Calendar 11 Other 88
46	Are short spots about contraception with humour appropriate (polite), or not?	Polite 1 Not polite 2
47	Do you prefer actors around the age of 20 or 30 to discuss contraception?	20 1 30 2
48	What information would you like us to explain in a short advertising 'spot' about contraception?	
49	Why is it that some women do not prefer to use the IUD?	
50	Why is it that some women do not want to be sterilized?	
51	Which kind of contraception have you used? <b>Multiple Answers</b>	Daily Pill 1 Monthly Pill 2 Injection 3 IUD 4 Sterilisation 5 Condom 6 Implant 7 Vasectomy 8 Traditional Method 9 Withdrawal 10 Calendar 11 Other 88
52	Do you have any good things to say about the contraception you have used?	
53	Do you have any bad things to say about the contraception you have used?	
54	If answers are <b>all correct</b> , code 1 literate	Literate 1

	<p>If <b>some answers are incorrect</b>, code 2 semi-literate</p> <p>If answers are <b>all incorrect</b>, code 3 illiterate</p>	<p>Semi-literate    2</p> <p>Illiterate        3</p>
<p>Interviewer notes or opinion</p>		

1	<p>Please draw a line from each picture to the correct word</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div>Cow</div> </div> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div>Shirt</div> </div> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div>Corn</div> </div>	
2	<p>Please write the name of the village, commune and district where you live every day</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	
3	<p>Please write the correct number and letter using the picture below</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 10px;">  </div> <div> <p>Number.....</p> <p>Letter.....</p> </div> </div>	
4	<p>Please tell me what time it is?</p> <div style="display: flex; align-items: center; justify-content: space-around;">  <div> <p>.....</p> </div> </div>	