

OVERVIEW

Viet Nam is a fast growing economy with an urban population of approximately 95 million people, of which 16 million are found in two main cities: Ho Chi Minh City (HCMC) and the capital, Hanoi. TRAFFIC's research shows that 4% of a sample of 600 respondents from these urban centres reported previously (ever) buying, using or gifting rhino horn (Ipsos 2012). Sought after due to its rarity, financial value and use as an ingredient with purported medicinal properties, the trade of this high-value commodity continues to drive actions of an illicit trade chain of poachers, middle men, traffickers and consumers.

Formative research identified the most prolific users of rhino horn in these two cities to be urban middle-class males aged 35–55. It also provided further insights into the psycho-social and socio-demographic attributes of these consumers, which informed the development of the "Mr. L" archetype. Targeting Mr L's specific consumption, attitudes and behaviours, the Chi behaviour change initiative was designed to reduce demand for rhino horn in Viet Nam and thus contribute towards a conservation impact for wild rhinos in Africa and Asia. The Chi initiative was officially launched in Hanoi on World Rhino Day (22 September), in 2014. It applies social marketing principles, messaging and approaches to undermine Mr. L's main motivators to consume rhino horn. The "Chi" brand was specifically designed with this archetype in mind, building on the word's linguistic meaning "strength comes from within" and the cultural significance of "Chi" in Viet Nam and other cultures in Asia. This behaviour change initiative delivers an evidence-based set of interventions to reduce consumer demand for rhino horn, and is the first of its kind for which the impact can be evaluated.

This briefing paper presents the Chi initiative and its progressive connection with one of the user groups of rhino horn, Mr. L. The Chi initiative's development and delivery is described referencing a five-step process used by TRAFFIC to deliver behaviour change. The research insights and results from the consumer surveys in 2012, 2014, 2016 and 2017 are also presented. The evaluation of impact achieved through four years of the Chi initiative's targeting of a specific audience has enabled a much deeper understanding of the consumer motivations, attitudes and drivers. The evaluation defines a framework for progressively accurate targeting and the evaluation of continued efforts towards a zero-tolerance to rhino horn consumption in Viet Nam.



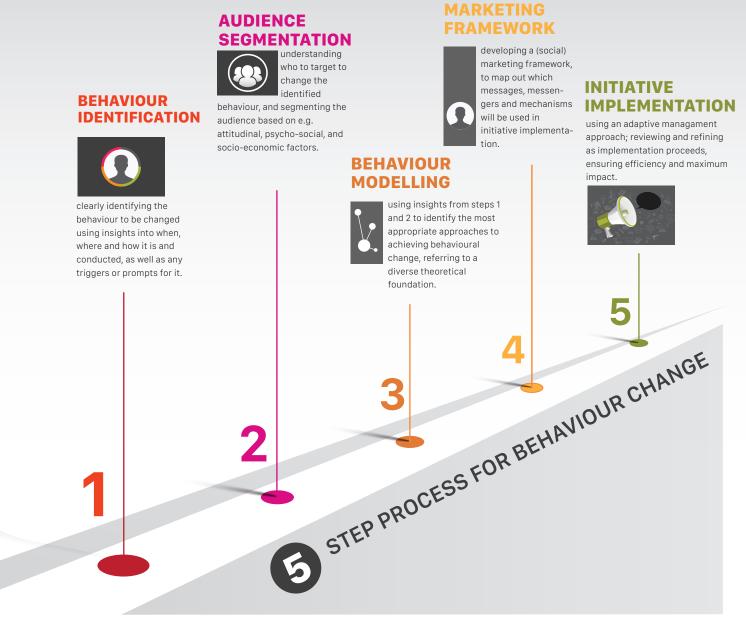


Figure 1. A five step process for behaviour change

TRAFFIC employs a step-wise approach to the development of a strategic behaviour change initiative. Actions are led by insights gleaned from evidence-based research, which enable the tracking of measurable change in the development of mechanisms and delivery of strategic messaging by key opinion leaders and other influential messengers (Figure 1).

To deliver effective behaviour change interventions to reduce consumer demand for illegal wildlife products, practitioners should:

- Research and gain understanding of the motivations and practices of (illegal) wildlife product consumption by consumer groups;
- Devise and communicate targeted messages which are most likely to resonate with the target audience and ensure the appropriate channels of delivery of the message to the target audience;
- Regularly evaluate the impact of the behaviour change intervention and adaptively manage any re-calibration needed to enhance its implementation.

THE DEVELOPMENT OF THE CHI INITIATIVE

The Chi initiative was developed following the Five Step Process and is summarised with reference to the five steps:

Step 1: Behaviour identification

The formative research to identify the motivations and practices around consumption of rhino horn was completed through a consumer survey in 2012 (see Annex I for details). This led to the insights that the consumption of rhino horn is driven by symbols of power, wealth, peace of mind and assurance that "I did the best" (Figure 2). The behaviours associated with this emotional motivation present themselves generally as the action of drinking rhino horn as a hangover cure and the gifting of rhino horn.

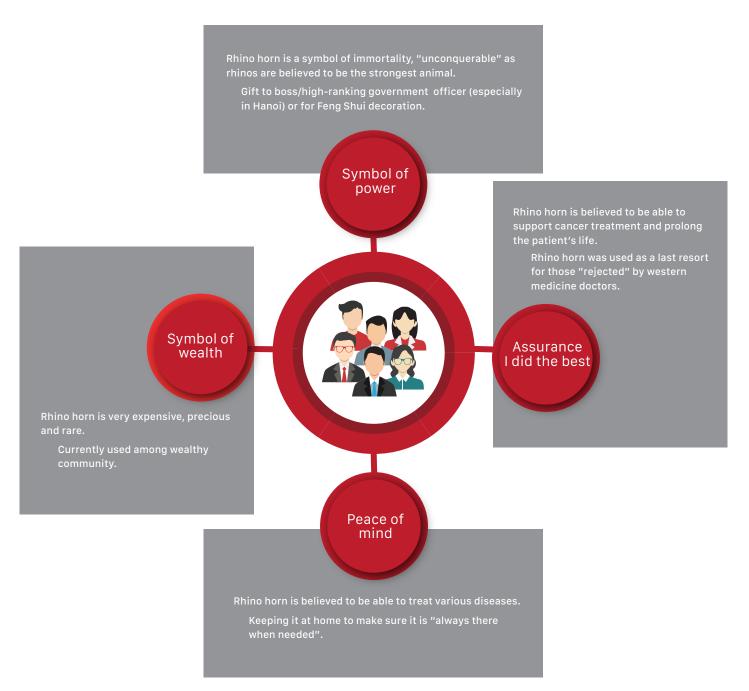


Figure 2. The key values of rhino horn for the general urban population in Viet Nam (Ipsos 2012)

Step 2: Audience segmentation

Using the evidence gleaned from the 2012 consumer survey, combined with insights from the 2014 survey, the target audience for the Chi initiative was developed on the base of psychosocial and socio demographic criteria and associated factors of one of the prolific groups of consumers; the archetype of "Mr. L" was created (Figure 3).



- · 35-55 years old, married with children
- · Earns +/- usd 1,500 per month of reported income
- · Top priorities: career success, social status, peer lifestyle
- · Desired image: leader, independent, confident
- · Influences: social and business contacts

Figure 3. The Mr. L archetype in detail (adapted from PSI 2014)

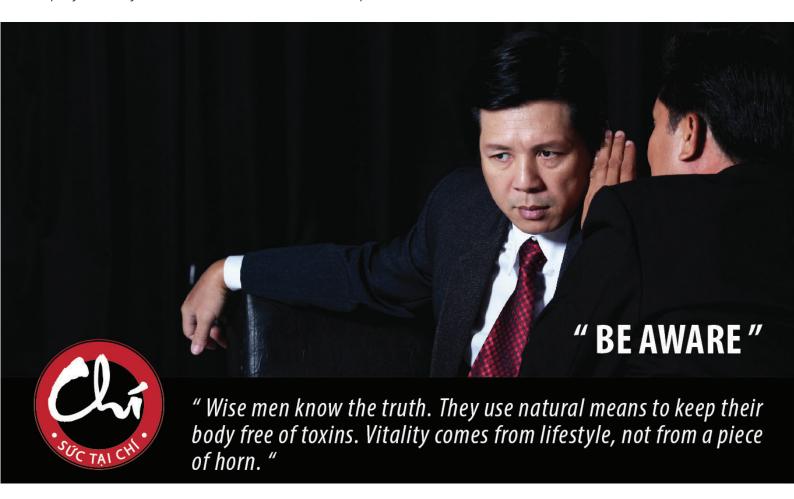
A total of seven profile statements of Mr. L were developed from the consumer survey findings to conceptualise the beliefs and attitudes driving rhino horn consumption by this target audience:

- · Mr. L believes that rhino horn is an effective agent for detoxification or hangover cure;
- Mr. L believes that rhino horn can bring a person improved socio-economic status;
- Mr. L believes that rhino horn is a valuable gift to gain favours and respect and can strengthen his business relationships;
- Mr. L is not worried about fake rhino horn, or how to find real rhino horn;
- Mr. L identifies rhino horn as having more value because it is illegal and dangerous to obtain;
- Mr. L believes that rhino horn is a valuable gift to gain favours and respect of others;
- Mr. L believes rhino horn works because it is so valuable and expensive.

The main motivation for Mr. L to consume rhino horn is categorised as "emotional" in nature, and includes practices and behaviours that represent the purchase for use of rhino horn to fulfil hedonistic pleasures, such as reputational gain and display of wealth (Burgess, 2016).

Step 3: Behaviour modelling

Informed by a host of relevant behaviour change models and social marketing practices, the barriers and benefits of undesired and desired behaviours were explored and a mix of interventions to increase barriers and reduce the benefits of the undesired behaviour as well as enhance the benefits and decrease the barriers for the desired behaviours, were developed. The transtheoretical model of behaviour change (Prochaska & DiClemente, 1983), also called the "Stages of Change", and the KAP¹ model of behaviour change, representing the behaviour change journey of transgressing knowledge, attitudes to desired practices (Medicins du Monde, 2011), also played a key role in the evaluation of the impact of Chi initiative interventions.



¹ Including Vlek's Needs Opportunities Abilities model, Roger's Diffusion of Innovations Model, Latour's Social Network Theory, Ajzen's Theory of Planned Behaviours, and the Twin track approach, were all used for the development of the behaviour change initiative.

KAP stands for Knowledge, Attitude and Practice.

Step 4: Marketing framework

A social marketing plan was developed and cross-referenced against eight relevant "benchmark criteria" to underpin the messages, messengers and mechanisms chosen for Chi initiative strategic communications. A social marketing "intervention mix" of behaviour change communication and creative approaches was not only informed by research evidence and insight from consumer surveys, but also influenced by local knowledge and understanding, culturally specific insights and values. The Chi brand was developed based on Chi's original meaning in Vietnamese, "strength comes from within". Associated communications materials aimed to use this headline in order to promote a shift from the target behaviours in Step 1 (consumption of rhino horn as e.g. a "hangover cure" in order to ostensibly display wealth, status, and to fulfil other "emotional" motivations such as hedonistic pleasure) to the desired behaviour of zero tolerance for rhino horn consumption.

Rhino horn is also consumed for purported traditional medicinal (TM) benefits (International Trade Centre, 2017; Milliken & Shaw, 2012). However, this "functional" motivation has not been addressed directly by Chi because the different motivation would require a different social marketing strategy. TRAFFIC has been working on addressing the formal TM use of rhino horn, by working with TM practitioners and TM universities and exposing this group to different behaviour change messages in respect to the social responsibilities of the TM sector and practitioners for not engaging in illegal practices and increasing the threat of extinction to threatened species.



TedX audience pledge zero-tolerance to wildlife consumption at TRAFFIC's talk at TedX Nguyen Hue Street in HCMC July 2016



TRAFFIC presents on expert panel to encourage businesses to champion CSR at the APEC 2017 Start-Ups Forum in HCMC September

The logo was purposely designed to be easily recognisable and visually appealing, but avoiding an overt association with rhinos or rhino horn. Social science theories show that the prompting of aberrant behaviour through images (in this case, e.g., a rhino as a majestic powerful creature, or horn being gifted and received, or a group of users happily smiling grinding up horn) can have the adverse effect and promote the undesired behaviour of rhino horn consumption². The Chi logo and images were designed by cross-referencing against behaviour change models and theories, and its resonance tested by focus groups.



Step 5: Initiative implementation

The Chi initiative so far has comprised of two phases, with Phase I from 22 September 2014 to the end of 2015, focusing on activities directly engaging the Mr. L audience, such as bike rides, golf club events, billboards and a micro-website. From the end of 2015, and more fulsomely realised in Chi Phase II (launched on 6 July 2016), efforts shifted in approach and the development of partnerships (most under formal MOUs) with key Vietnamese civil society organizations (CSOs), such as the Vietnamese Chamber of Commerce and Industry (VCCI), and other umbrella organizations in the transport, e-commerce and other business sectors were established. Through the development of a corporate social responsibility (CSR) tool kit and a range of workshops these organizations championed the delivery of the Chi message and maximised the engagement of the target audience with the behaviour change messages. Key opinion leaders from CSOs, universities, government and the corporate sector played a key role in increasing the resonance and reach of the Chi initiative. For example, providing approval to play the Chi movie on the Viet Nam Posts and Telecommunications Group (VNPT) official website and internal communication channels to more than 90,000 employees, and risk management procedures for transport companies to avoid being implicated in wildlife trafficking. Government agencies also played a key role in the delivery of Chi, for example a formal Memorandum of Understanding (MoU) with the Central Committee for Propaganda and Education enabled the placing of billboards at Hanoi's Noi Bai International Airport and the dissemination of the Chi Lunar New Year Calendar amongst 500+ senior government officials.



² For examples of this phenomenon see: Freeman, B, & Chapman, S (2007), Is "YouTube" telling or selling you something? Tobacco content on the YouTube video-sharing website. *Tobacco control 16.3: 207-210*; Lewis, S. P., Heath, N. L., St Denis, J. M., & Noble, R. (2011). The scope of non-suicidal self-injury on YouTube. *Pediatrics*, 127(3), e552-e557.

SUMMARY OF THE CONSUMER SURVEYS' RESULTS

Evaluation of the Chi initiative and its impact on the target audience has been conducted through four consumer surveys (Annex I), to track implementation and the impact of the interventions on target audience behaviour, and to inform adaptive management where needed.

The first consumer survey in 2012 (Annex I) provided the initial understanding of the core values of rhino horn consumers in Viet Nam. It was found that 4% of the surveyed participants (N=600) had used and/or bought rhino horn and 16% (N=600) were intending to use rhino horn in the future. The results of this survey identified four main consumer groups: Buyers, Users, Intenders and Non-Intenders. The first three are classified as the "consumer" groups of rhino horn, with the latter not a target audience segment as it already displays the desired behaviour.

The formative research provided an insight into the awareness and attitudes of rhino horn consumers and their disconnection from rhino poaching and possible extinction (Figure 4).

Three subsequent surveys, in 2014, 2016, 2017, focused on the evaluation of behaviours and motivations of Mr. L, the Chi initiative's target audience (see Annex I for details on the sample criteria for the surveys and Figure 3 for Mr. L's profile). In 2014, shortly after the launch of the Chi initiative, the consumer survey which directly targeted Mr. L, found 27.5% reported to have consumed rhino horn at least once in their life. In 2016, a significant decline of the reported life-time use of rhino horn was observed from an average of 27.5% in both Hanoi and HCMC, down to an average of 6%. In 2017 a similar number of Mr. L, 7%, reported to have consumed rhino horn at least once in their life-time (Figure 5). A similar decline was also found by the Nielsen Survey (HSI, 2016). The reported consumption continued to go down in Hanoi but increased in HCMC over those two years.



Figure 4. Quotes from 2012 survey participants (Ipsos 2012)

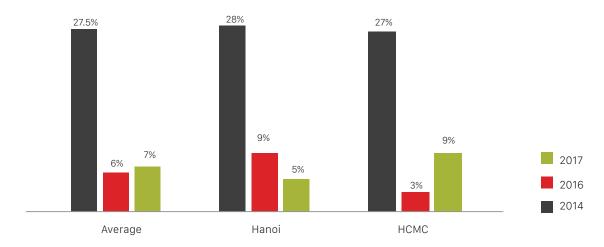


Figure 5. The percentage of self-reported "ever" use of rhino horn in 2014, 2016 and 2017 (N=600)

There are challenges with assuming any trends for a number of reasons:

- Across all years of the survey, there were significant changes in the occupational status (Figure 6) and other socio-demographics of the survey respondents. Despite repeating the same survey protocol, methods and sample techniques (see Annex I), over the years there will be changes because it is impossible to guarantee the same respondents as part of the sample, especially when the survey relates to illegal behaviours.
- Since the first survey in 2014, in each survey, a similar number of rhino horn consumers continue to report to have consumed rhino horn less than two years ago. In 2017, almost twice the number of Mr. L reported their most recent consumption to be within the last six months (Figure 7). Detailed analysis of survey results shows that there was in fact a considerable difference in response for 2017 between HCMC and Hanoi. For the former there was an increased claim of recent consumption, for the latter a continued decline. This may corroborate other evidence of novel uses emerging in HCMC in 2017.
- The survey respondents seem to be becoming increasingly mindful of the illegality and social unacceptability of consuming rhino horn, and could be therefore less open or comfortable to talk about it, this could have had an impact on the results of the consumer survey (Figure 8).

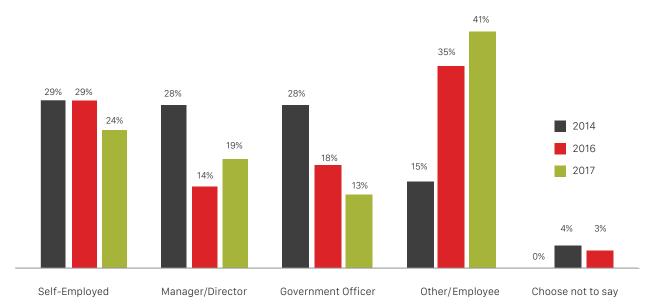


Figure 6. The ratio of occupations for users across the three consumer surveys

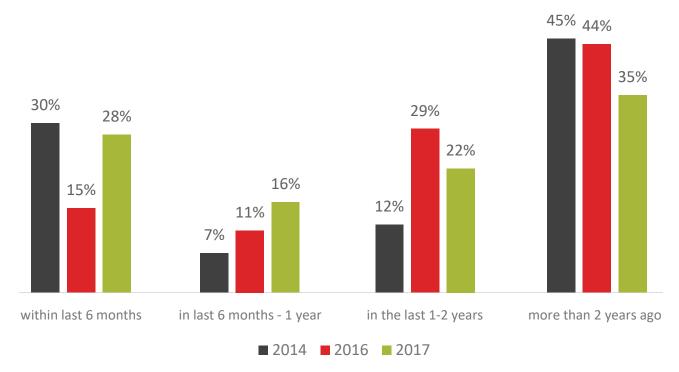


Figure 7. Timing of the most recent consumption amongst rhino horn consumers (2014 n = 110; 2016 n = 32; 2017 n = 43)

"Communications [about Rhino protection] have made rich people, informed people not comfortable about it [showing off that they have RH]," Government officer, age 48.

"Now the government has made a lot of effort to prevent RH traffic. If you use it, you are accomplice, so no one want to show off about it," Government officer, age 55.

"With my position, using [wild animal products] is not good for my job. It will affect my reputation," Government officer, age 41.

Figure 8. Quotes of Mr. L from the 2017 survey identify the possibility to increased reluctance of not to report or mitigate untruthful reporting

The two most commonly cited reasons for consumption of rhino horn offered by the Vietnamese and International media (and believed by the general public outside Viet Nam) are: that rhino horn is consumed as a cure for cancer, or other terminal diseases; or as aphrodisiac to improve sexual performance and libido. However, these survey results identify these two uses are the least prevalent reasons reported by Mr. L. in all three consumer surveys. The most consistent reported uses of rhino horn are as detoxification and general wellness, or as a hangover cure (Figure 9). However, in 2017, a significant spike in the use of rhino horn in the belief it would enhance sexual performance was found; 44% of Mr L. living in HCMC, compared to Hanoi, 18%, reported they used rhino horn in the belief it would enhance sexual performance.

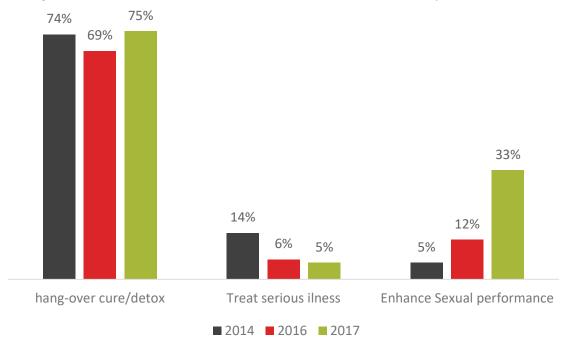


Figure 9. The main self-reported reasons of rhino horn use (average) over the three consumer surveys (n=104)

Through the consecutive quantitative and qualitative surveys of the target audience an in-depth understanding has been developed. It has thus become possible to map the frequency of use, the variety of beliefs in rhino horn's effects and the specific type or reason for rhino horn consumption (Figure 10).



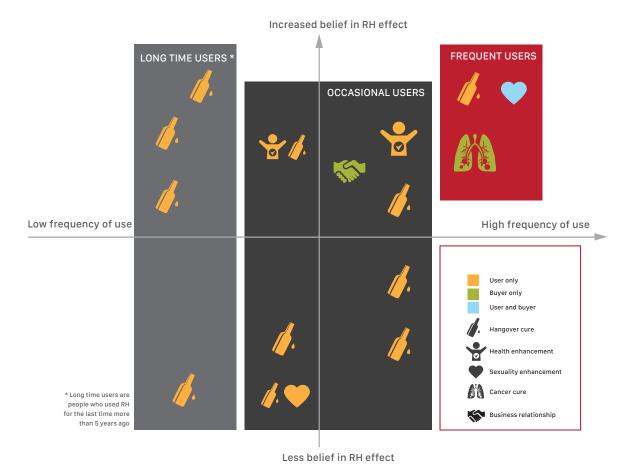


Figure 10. The purpose for use correlated against beliefs and frequency of use (IndoChina Research Ltd 2017)

It becomes clear that frequent users have slightly different reasons to be using rhino horn than occasional users. Occasional users are more often driven by curiosity, leading to opportunistic consumption, and gifting to superiors, whilst frequent users have a strong belief in the well-being effects of rhino horn itself (Figure 11).

"To be real, no one has done test to confirm what disease rhino horn can cure, but I think it has to have some effects to be that expensive," Frequent Consumer.

"People said it can prevent and cure cancer. If it could people would have to use it as a prescription drug. But I think when people talk that much about it, it mightactually have some effects," Frequent Consumer.

"I used to throw up after drinking but after using rhino horn, I don't throw up anymore. About 15 minutes after drinking it, I would feel better," Frequent Consumer.

"I have done some research about rhino horn on the internet, discussing with friends. I have also consulted Chinese and Eastern Medicine doctor and doctor for the University of Medicine and Pharmacy. Rhino horn has health benefits. There is scientific evidence and doctors' recommendation, "Frequent Consumer.

"I was curious, I heard people talk about it and I want to try to see if it has any effect. I used it but don't really feel improvements," Occasional Consumer.

"That was with some business partners. They said it had sexual benefits and it was expensive, they bought it abroad. They are like brothers to me so I tried it. I was afraid to offend them if I said I don't like it.[...] I tried it to please them even though I don't believe it [has any effect], "Occasional Consumer.

Figure 11: Quotes from 2017 Survey (frequent and occasional users)

THE CHI INITIATIVE IMPACTS ON MR. L

Through the evaluation of a range of social marketing techniques the impact of the Chi initiative on Mr. L's attitudes, beliefs and practices can be evaluated. Three indicators, described below, have been used to evaluate the impact of Chi on the target audience thus far.

Firstly, the Effective Reach. The Effective Reach is used as a measure of which proportion of the target audience has been exposed to a specific message/campaign and subsequently remembers the message or logo. In theory, the more times this person is exposed, the more likely this person will change their practices towards the desired behaviour; the exposure threshold in the case of Chi was three times. In 2016, the Effective Reach amongst rhino horn consumers was assessed to be 27%, but had almost doubled to 57% by 2017. In social marketing terms, both are deemed high Effective Reach scores; demonstrating primarily that the Chi initiative is reaching and impacting on the target audience, Mr. L, the consumers of rhino horn. These scores indicate that the strategic shift to delivering Chi through the CSO networks, using the strength of the peer-to-peer social networks, and existing expertise to ensure the Chi initiative tools and communication, such as the CSR toolkit, further enhanced the Chi initiative message resonance. The scores demonstrate that the Chi initiative encourages Mr. L to engage on a behaviour change journey towards a zero-tolerance of rhino horn consumption.

The second indicator is the Net Promotor Score (NPS). The NPS is used to evaluate the level of engagement of the respondents to promote or not promote a certain behaviour: in this case, not to consume rhino horn. In the 2016 survey, it was shown that the Mr. L archetypes who were in contact with the Chi initiative (n=112) had the highest positive NPS of 46%. This NPS was higher than the main sample of participants interviewed (random sample n=527; NPS = 37%) and much higher than the booster sample of rhino horn users (NPS = -38%, n=73). This is a strong indicator of the campaign effectiveness and its impact, with 64% of respondents identified as promotors unwilling to recommend rhino horn consumption to their peers and social networks.

The third indicator of impact for the Chi initiative is the Agreement Index. The Agreement Index rates the agreement of the responses of those answering a specific question. In analysing the Agreement Index in 2017 pertaining to different audience segments of the main sample (N=600, and a rhino horn user booster of n=60, Chi Partners, n=30, etc. See Annex I), it was determined that the Chi initiative engages and resonates with its target audience. The Chi Partners (n=30), individuals who have been actively involved in the Chi initiative, were uniformly and consistently less likely to use rhino horn. This affirms a shift in knowledge, attitude and practices towards a zero-tolerance of the consumption of rhino horn (Figure 12).

³ A booster sample is an additional group of respondents with a particular characteristic which allows you to focus on a small subgroup that wouldn't normally be adequately represented in a main survey

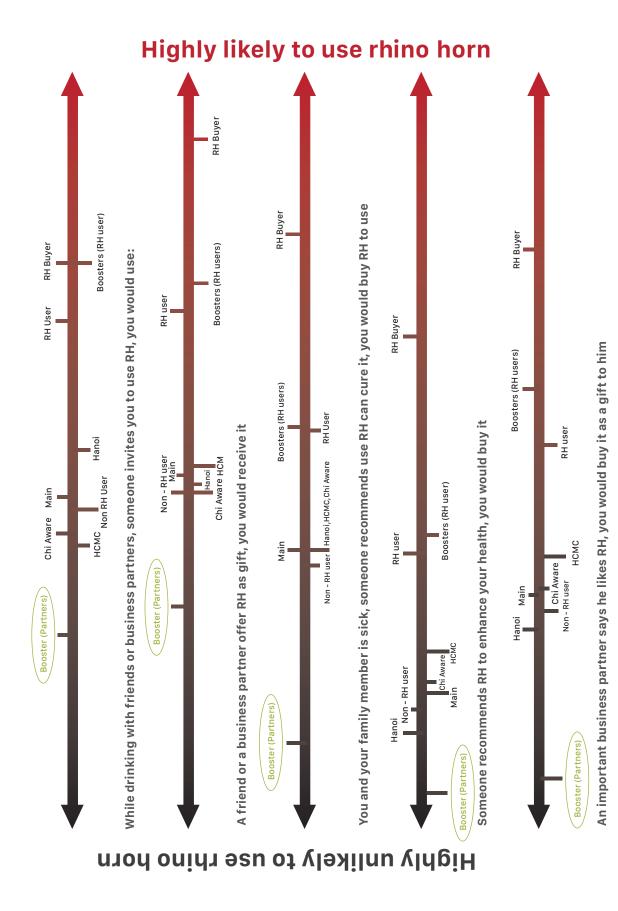


Figure 12. A summary of the Agreement Index on the likelihood to intend to use rhino horn from the 2017 Survey (Main Sample (n=600), partners (n=30), RH users (n=109), Hanoi (n=300), HCMC (n=300), Chi Aware (n=385), RH User (Booster) (n=60) and RH buyer (n=29)

CONCLUSIONS

A significant sustained decline in self-reported rhino horn use was found between 2014, 2016 and 2017 surveys, from 27.5% to 6% and 7% respectively. The data indicates a steady decline of reported consumption since 2014 for Hanoi, and for HCMC, for the same period a drop, but then increase in 2017. This increase in HCMC corroborates other information about a change in motivations to use and a shift in beliefs on the purpose of the product. This reduction in self-reported use, however, was not found to be correlated with a reduction in trafficking of the commodity. In fact, the number of seizures of trafficked rhino horn continued to increase in 2016 and 2017. This indicates the ongoing trafficking and supply of illegal rhino horn into Viet Nam, but at the same time demonstrates an increased law enforcement effort by the Vietnamese government.

Despite the ongoing trade of rhino horn, the Chi initiative is having a promising impact on Mr. L, one of the prolific rhino horn consumer groups. Chi is reaching, has resonance and Mr. L is engaging on a behaviour change journey. Through the evaluation of the impact of Chi, we find that significant regional differences have started to emerge between the Mr. Ls in Hanoi and HCMC. The data suggests there could be a surge in use of rhino horn for sexual enhancement in HCMC, a behaviour not specifically targeted by the Chi initiative, which focusses mainly on the display of wealth and status. No demand reduction initiatives in Viet Nam address this motivation currently. In addition, differences between frequent and occasional users of rhino horn are also becoming more evident.



KEY LESSONS LEARNED

- For the most effective, efficient and sustained delivery of the Chi initiative, and other Behaviour Change initiatives, strategic delivery and embedding behaviour change messages in the influential layers of society will increase the level of impact. In the case of Chi, targeting the business sector, related umbrella CSOs and the government has enabled effective uptake and resonance with the target audience as demonstrated by the indicators.
- Awareness raising on the plight of the species and the facts of rhino horn's properties do not resonate with the prolific group of consumers, and therefore are not likely to be effective at changing this group's behaviour. The research shows that the facts of illegality of rhino horn consumption and images of butchered rhinos strengthens the desire for and belief in the product. Furthermore, TRAFFIC's research demonstrates that this group is informed by their social networks, family and friends, not by the facts of the chemical composition of rhino horn, or concerns about the threat of extinction of a species.
- More efforts are needed to improve the evaluation and measuring of the impact of Social and Behavioural Change Communications (SBCC) approaches. TRAFFIC is developing a good practice guide in consultation with other experts in the Community of Practice of experts of behaviour change approaches, which could assist in "standardising" consumer survey data for longitudinal comparison of consumers of rhino horn and other wildlife products. Also, the evaluation of the survey data of an illegal behaviour, such as the consumption of illegal wildlife products, needs to be further examined Additionally, efforts should be made to develop a framework where consumer research "soft" data can be reconciled with "hard" data such as the variability of product in physical and virtual marketplaces; changes in the number of offers for sale; fluctuations in the number of actual products bought and other data sources (such as price of the commodity, confiscations by law enforcement action etc.), to assess the impact of demand reduction strategies on the illegal trade chain. Additionally, demand efforts rely somewhat on the enabling environment and perceptions of risk by user groups. Thus, an idealised scenario to support behavioural interventions to reduce consumer demand could include measures to evaluate the effectiveness of the government to enforce and penalise illegal import/sale/purchase and possession, and thus increase deterrents to undesired behaviours.
- The limitations to securing data from consumers of rhino horn, i.e. due to its clandestine and illegal nature, and in particular, the manner through which consumption channels are shifting from physical to e-commerce and social media markets, are challenges that must be overcome to enable rigorous evaluation of the impact of behaviour change initiatives.

FUTURE DIRECTIONS

The continuation of the Chi brand and Chi initiative: the consumer surveys provide valuable insights for the adaptive management and effective delivery for the continuation of the Chi initiative. For the third phase of Chi, and once funding has been secured, there will be efforts to develop specific messages to address the increase in rhino horn use for sexual enhancement in HCMC. In addition, efforts will be initiated to address the specific motivations of the frequent user consumer segment whilst continuing to address the occasional users' motivations through the current and extending networks. The network of key opinion and sector leaders will also be further extended, and will engage the banking, tourism and legal sectors with CSR practices. Further engagement with government departments is also critical and will take place in the third phase of Chi through specific targeted social responsibility messages.

Now that it has been demonstrated that the Five Step Process for Behaviour Change can be used to engage wildlife consumers on a behaviour change journey, this approach should be extended and applied to address specific motivations around traditional medicinal use of threatened species, and/or be applied to reduce the demand for specific species products.

In order to break the illegal trade chain, it is necessary to improve the effectiveness of law enforcement, i.e. increasing the risk to wildlife criminals (poachers, traffickers, traders and consumers) of being apprehended and prosecuted, to restrict market supply, and at the same time support the shift in social norms of individuals. This is also called the "twin-track approach". It is hoped that the new penal code, which will come into force on 1/1/2018, can further enhance the effectiveness of law enforcement efforts and increase the deterrent through increasing the number of prosecutions (and level of punishment) for wildlife criminals.

Further Information

The Wildlife Consumer Behaviour Change Toolkit (www.changewildlifeconsumers.org) is a freely accessible resource for the community working to reduce consumer demand for threatened species.

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TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development

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ANNEX I

The details of the consumer survey completed by Ipsos in 2012

SURVEY TYPE	DATE	SAMPLE SIZE	TARGET AUDIENCE RESPONDENT CRITERIA
Qualitative (in-depth interviews)	12 November – 15 December 2012	34	 Buyers/Users of rhino horn (n=20): bought/used rhino horn in the past 3 years; 20+ age, mix of gender; medium-high income Non-users/buyers (n=10): aware of rhino horn; mix age, all 30+, mix of gender Traditional medicine/herbal expert (n=4): 10+ years' experience Equal sample in each HCMC and Hanoi
Quantitative (questionnaires developed from the qualitative phase of the survey)	21 February – 12 March 2013	Main sample: 300 HCMC; 300 Hanoi; Booster Users/buyers: 56 HCMC 54 Hanoi	 Public; 30⁺ years old; medium to high income; aware or non-aware of rhino horn; might/might not be users/buyers; randomly selected Non-users n=291 HCMC; n=279 Hanoi; Users/buyers n=9 HCMC; n=21 Hanoi Booster samples buyers or users of rhino horn n=47 HCMC; n=33 Hanoi



The details of the consumer survey completed by PSI in 2014

SURVEY TYPE	DATE	NUMBER OF RESPONDENTS	SAMPLE AND RESPONDENT CRITERIA	
Quantitative (questionnaire)	October – November 2014	Total: 600 300 in Hanoi 300 in HCMC	 High-income households in selected communities which were identified through prior mapping from other primary and secondary evidence (i.e. real estates) 10 households in each area surveyed to estimate household income and number of family members per household (3,260 households were identified) Men aged 30–55, resident of a high-income area for at least 6 months Average taxable monthly income of at least 30 million VND Had heard of rhino horn 	
Survey Details	 Rates of reported rhino horn use and other baseline indicators were estimated using this representative sample of the high income urban male Respondents were divided into intenders and users: Intenders were categorised as of those who had not used rhino horn in the last 6 months; and, users those who had done so. Reasons/motivations for use Source of the product The reason for intended use Awareness of the legal and ethical implications Occupation of respondents Rate of refusal was 3.2% for qualified respondents A number of focus groups, with users and intenders, also took place to test the Chimessages and creative assets 			

The details of the consumer survey completed by Indochina Research Limited in 2016

SURVEY TYPE	DATE	NUMBER OF RESPONDENTS	SAMPLE AND RESPONDENT CRITERIA		
Quantitative (questionnaire)	17 December 2015 — 11 January 2016	Total: 600 Random sample: 527 interviews completed by random sampling in same locations as 2014 (268 in Hanoi; 259 in HCMC) Two Boosters, total of 73 interviews: At least 50 respondents were users; And at least 30 respondents had been in contact with Chi.	 Urban male aged 35–55 Residents in high income urban areas of Hanoi and HCMC for at least 6 months Average monthly income of at least 30 million VND Ever heard about rhino horn 		
Survey Details	Determine the: • Level of awareness surrounding Chi initiative and its messages • Sources of information of the campaign and its impact • Frequency of use of rhino horn • Main reasons for use of rhino horn • Future intentions of use of rhino horn				
Qualitative (in-depth interview)	11 January 2016 — 1 March 2016	Total: 10 5 in Hanoi 5 in HCMC	 Urban male aged 35–55 Residents in high income urban areas of Hanoi and HCMC for at least 6 months Average taxable monthly income of at least 30 million VND Rhino horn users or buyers Priority to respondents in contact with Chi initiative Who are supposed to be influenced/covered or defined as target audience of the campaign 		

The details of the consumer survey completed by Indochina Research Limited in 2017

SURVEY TYPE	DATE	NUMBER OF RESPONDENTS	RESPONDENT POPULATION	
Quantitative (questionnaire)	1—25 January and 8 February —9 March 2017	Main sample: 600 (300 Hanoi + 300 HCMC) Additional Boosters: - Rhino horn consumers: 60 (equal split Hanoi/ HCMC) - TRAFFIC partners: 30 (both boosters are not part of the main sample)	 Urban male aged 35–55 Residents in high income urban areas of Hanoi and HCMC for at least 6 months Average taxable monthly income of at least 30 million VND ⁴ Have previously heard about rhino horn 	
Survey Details	Determine the: • Level of awareness surrounding Chi Initiative and its messages • Sources of information of the campaign and its impact • Frequency of use of rhino horn • Main reasons for use of rhino horn • Future intentions of use of rhino horn			
Qualitative (in-depth interview)	6–28 March 2017	15 in-depth interviews	 From Ho Chi Minh and Hanoi Aged 30–55 Consumers of rhino horn 	

⁴ Due to the government officers' lower taxable incomes, it was decided that for this occupation the taxable income ceiling would be lowered to 15 million VND, in order to enable to include government officers into the sample size.

