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A quantitative analysis of kalandars and captive bears in Pakistan

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prepared for

WSPA Asia and Bioresource Research Centre

Introduction

In 2013, the Bioresource Research Centre (Islamabad, Pakistan) conducted a comprehensive census of the remaining dancing and bear-baiting bears in Pakistan. This involved locating and counting the actual involved bears and bear keepers (kalandars), collecting detailed socio-economic data from the bear-keepers, and identifying attitudes and key drivers behind this livelihood. This report summarizes the findings from the census, reveals relationships in the data that are not immediately apparent, and identifies potential leverage points for ongoing campaign efforts.

Data management, processing, and quality assurance

Data were collected by a field staff assembled and supervised by Dr. Fakhar-i-Abbas with the Bioresource Research Centre. Field surveys began in May 2013 and were completed in December 2013. Data were sent electronically from Pakistan to the United States in Microsoft Excel format. Data were further processed and cleaned in Microsoft Excel, and metadata descriptors were created. Statistical analyses were conducted using the commercial statistical software JMP version 10.

Description of the approach

We analyzed responses to the questionnaire (a copy of the questionnaire is provided at the end of this report), providing both summary statistics and data analytics. Mainly, we relied on cross tabulation analysis. This is a statistical technique used to find associations between two variables when using categorical data. Associations are tested using chi-square or log-likelihood analysis, and are considered statistically significant at the 0.05 level. In other words, there is less than a 5% chance that the associations we report are due to chance. We also used a data mining approach termed classification and regression tree analysis. This helped us determine the sets of characteristics with kalandars who would or were not sure if they would give up their bear, compared to those that said they would not give up their bear.

Limitations and Assumptions

There are several limitations that must be kept in mind when reading this report. Not all kalandars answered all questions. While 166 kalandars were interviewed, none answered all of the questions. We further cannot be sure that all respondents were honest, and our analysis rests largely on honest answers. However, our internal analysis of the data records suggest replies were honest in most cases. We believe it is more likely that a kalandar would not answer a question rather than be deliberately misleading. We also believe some questions may have been misinterpreted by the kalandars, which we note in the report.

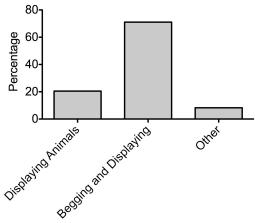
Key Findings

A total of 166 kalandars were interviewed. Not all kalandars answered all questions. The number answering a particular question is given as the value "n = " in the analysis below. In some cases, we believe the kalandars did not answer questions clearly or honestly. In these cases, we identify our concerns.

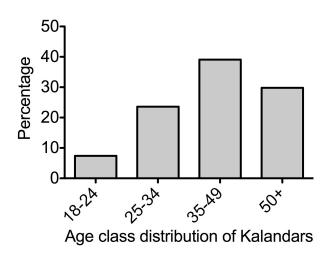
1. Demographic features of kalandars in Pakistan

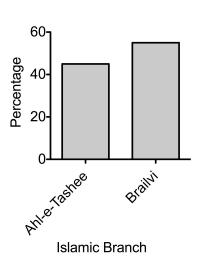
All were male. Just over two-thirds were over the age of 35 (n = 161). Kalandars listed their main occupation as displaying animals, a combination of begging and displaying animals, or some other occupation, alone or in combination with displaying animals (n = 156).

All followed the Islamic traditions of Brailvi or Ahl-e-Tashee (n = 161).



Profession of Kalandars





Followers of Ahl-e-Tashee were more likely to list displaying bears as their primary occupation (27.8% of all respondents) compared to followers of Brailvi (14.8%). Moreover, zero followers of Ahl-e-Tashee listed an occupation that did not include displaying animals, compared to followers of Brailvi (16%).

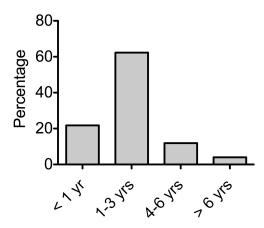
There was a weak but significant association between religion and age, with 18-24 year olds identifying more strongly with Ahl-e-Tashee (83.3% of all individuals in this age group).

2. Captive bears and their uses

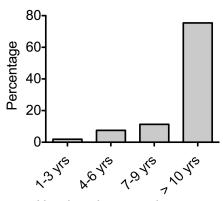
Two-thirds of all respondents (n = 144) said they currently had a bear. Of the one-third that did not, one indicated that their bear died the day before.

When asked about who owned the bear, 91.9% stated that they owned the bear, and 6.1% reported borrowing the bear from a relative (n = 99). We believe most individuals that did not answer this question did not currently have a bear. However, two individuals that indicated they did not currently have a bear stated that they were the owner. One individual that indicated they did not currently have a bear stated he borrowed the bear from a relative.

Most kalandars have been performing with bears for more than 10 years (n = 106). There is a significant (and unsurprising) relationship between kalandar age and how long they have been performing with bears. However, it is remarkable that 57% of individuals between the ages of 25-34 report having performed with bears for 10 or more years. This indicates to us that performing with a bear is a career choice that becomes established at a very young age. No 18-24 year olds report performing with bears for more than 6 years. Only 5% of older individuals (50+ years) report performing with bears for less than 10 years.



How long have you been performing with this bear?



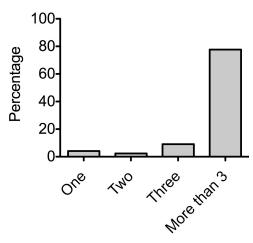
How long have you been performing with bears overall?

As expected, older individuals have had more bears over their lifetime (n = 121). No individuals between the ages of 18-24 have ever owned more than 2 bears. By the time a kalandar reaches the 25-34 age group, they are likely to have owned 3 or more bears.

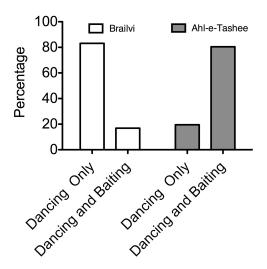
Kalandars (n = 101) report using their bears for dancing (56.4%) or dancing + baiting (45.4%). None reported using bears for baiting only. There was a significant breakdown along religious lines. A majority of followers of Ahl-e-Tashee reported using bears for dancing and baiting, while the majority of Brailvi followers reported using bears for dancing only.

There may be a significant relationship between the reported profession and bear use. While our data set is too small for a robust analysis, it does appear that of individuals who report a main occupation in addition to displaying animals or begging, none reported using their bear for baiting.

Kalandars report that their preferences for bear use are nearly identical with their actual use. When asked why they had their preference, some interesting patterns emerged (n = 107 for all percentages provided below). Individuals were allowed to select more than one reason. Of individuals that used their bears for dancing, 80.4% said that their choice was based on "better income." For individuals that used bears for dancing and baiting, this percentage increased to 97.2%.



How many bears have you owned in your lifetime?



How do you use your bear?

Of individuals that used their bears for dancing only, 92.9% said that their choice was based on "easier work." For individuals that used bears for dancing and baiting, this percentage dropped to 45.4%.

Of individuals that used their bears for dancing only, 32.1% said that their choice was based on "less travel." For individuals that used bears for dancing and baiting, this percentage dropped to 4.5%.

Of individuals that used their bears for dancing only, 60.7% said that their choice was based on "more comfortable environment." For individuals that used bears for dancing and baiting, this percentage dropped to 2.2%.

Of individuals that used their bears for dancing only, 41.1% said that their choice was based on "better independence." For individuals that used bears for dancing and baiting, zero of 44 stated that it provided better independence.

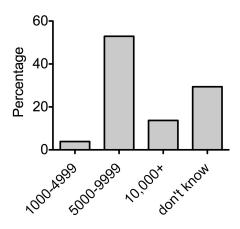
Of individuals that used their bears for dancing only, 3.6% said that their choice was based on "it is the family business." For individuals that used bears for dancing and baiting, zero of 44 stated that it was the family business.

3. Bear baiting

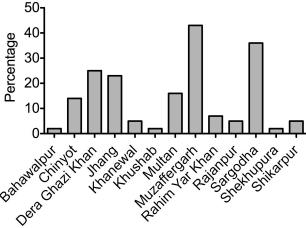
Only 69 kalandars answered the question about how many bear baiting events they participated in over the past 12 months, and of these, 36.2% stated that they had not participated in bear baiting in the last 12 months. Two of 25 individuals that had stated earlier that they use their bears for dancing only (no baiting) stated that they used their bear for baiting several times in the past 12 months. Both were followers of Ahl-e-Tashee, although there are too few individuals to establish a statistical association here. Alternatively, 3 of 43 individuals who stated they used their bears for dancing and baiting did not participate in any baiting events in the previous 12 months. Two were followers of Ahl-e-Tashee and one was a follower of Brailvi.

When asked how many times a bear fights per event (n = 49), 53% responded "more than 3 times" and 26.5% responded "2-3 times." No response was given by 18.3%. Only 1 of 49 respondents stated "just one time." There was a significant positive association between the number of fights per event and the average income per event reported. There was no association between religious belief and number of fights per event.

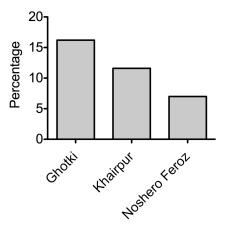
While a large fraction of individuals replied that they did not know how much money they made per event, this seems unlikely, as nearly all kalandars who reported using bears for baiting and dancing stated that income was a strong factor.



How much money (PKR) do you earn per bear baiting event?



Districts in which Kalandars participated in bear baiting in the last year (Punjab)



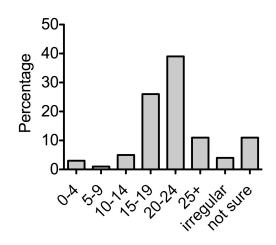
Districts in which Kalandars participated in the last year (Sindh)

Only 43 of 166 kalandars divulged the districts in which they participated in bear baiting. Baiting took place in 13 districts in the Punjab and 3 districts in Sindh. Of 52 respondents, 42.2% reported encountering resistance against bear baiting from authorities, and 48.1% reported never encountering resistance. The remaining kalandars did not answer this question. Many respondents could not recall in which districts they encountered resistance. Of those that provided a district, all were in the Punjab: Dera Ghazi Khan (16.6% reporting resistance), Gujranwala (25%), Multan (8.3%), Muzaffergarh (8.3%), Rahim Yar Khan (25%), and Toba Tek Singh (16.7%).

4. Dancing Bears

Only 100 kalandars answered the question about how many times they used their bear for dancing per month, most reported using their bears frequently (> 15 days per month). Bears used for dancing only were used for dancing just as many days per month as bears used for dancing and baiting.

Most kalandars earn less than 500 PKR per day (5 USD) with bear dancing. Kalandars that stated their profession was displaying animals and begging used bears for dancing more days per month than those that stated their profession was displaying animals only.



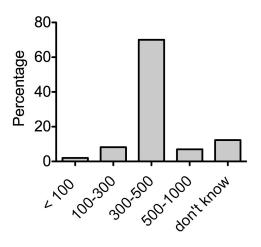
How many days per month do you use your bear for dancing?

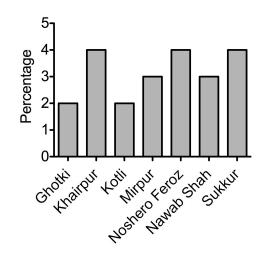
Over 10% of kalandars reported dancing in the following districts in the Punjab:

Bahawalnagar, Bahawalpur, Chinyot, Gujranwala, Jhang, Muzaffergarh, Sargodha, and Vehari. There was a strong correspondence between the districts where kalandars performed with dancing bears and their preferred districts for performing.

Performing with dancing bears appears less common outside of the Punjab, with fewer than 5% of kalandars performing with dancing bears in any district. As seen in the Punjab, there was a strong correspondence between the districts where kalandars performed with dancing bears and their preferred districts for performing.

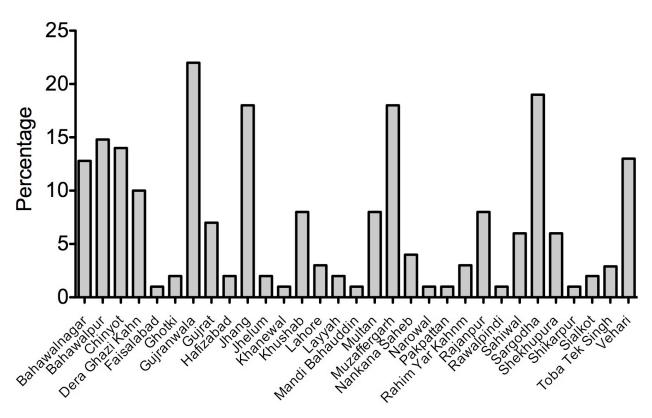
When asked why they performed in the districts that they did, kalandars (n = 71) provided the following information: 60% said the people there were rich, 5% said the people there were generous, 24% said that there were no problems with officials, 81% said people there were friendly or keen, 66% said the area was easy to reach, and 56% said the people there were respectable, honorable, or noble.





How much do you earn per day (PKR) with dancing?

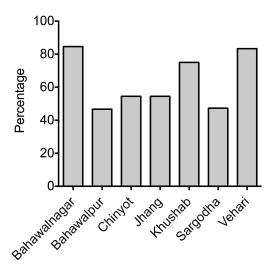
Percentage of Kalandars performing with dancing bears in districts outside the Punjab



Percentage of Kalandars performing with dancing bears in Punjab districts

In 12.6% of cases, kalandars (n = 95) reported that "they only perform in a specified (designated) area." This was not an option on the questionnaire, but they volunteered this response. This suggests some kind of social agreement, but we do not know the nature of this arrangement. This occurred in Dera Ghazi Khan (n = 2), Gujranwala (n = 10), Muzaffergarh (n = 2), and Rajanpur (n = 1). Most of the kalandars that reported engaging in this practice (10 of 12) were Brailvi.

Of the districts where kalandars reported no problems with officials interfering with bear dancing, the following districts were named by at least one kalandar: Bahawalnagar, Bahawalpur, Chinyot, Dera Ghazi Khan,



Percentage of Kalandars reporting non-interfering officials as a reason for performing in the district

Faisalabad, Jhang, Khairpur, Khanewal, Khushab, Layyah, Muzaffergarh, Sahiwal, Sargodha, Shikarpur, and Vehari. Several districts were only identified by a single kalandar (not shown in graph). We found a positive association between districts with non-interfering officials and districts where people were friendly or keen, suggesting social support for officials to ignore infractions involving dancing bears.

5. Intensively-used bears

Of bears that are used for both dancing and baiting for which we have data (n = 48), 50% are used for dancing at least 15 days a month and are used more than three times per bear baiting event. We term these "intensively-used bears." Religion was a significant predictor of these intensively-used bears. Followers of Ahl-e-Tashee comprised 45% of all survey respondents, but accounted for 70% of all kalandars that used their bears for dancing more than 15 days per month and used their bears more than three times per baiting event. kalandar age was not a factor.

Kalandars that report having owned more than 3 bears in their lifetime were more likely to use their bear intensively. Kalandars who used their bears intensively were also more likely to have taken their bear to see a veterinary doctor (44% of all intensively used bears) than kalandars who used their bears less intensively (13.4% of these bears had been taken to a veterinary doctor). No kalandars that use their bears for dancing only report ever taking their bear to see a veterinary doctor.

6. Kalandars and bear-keeping

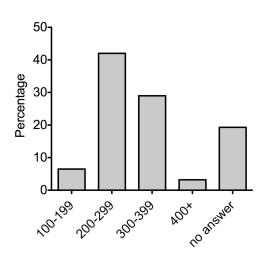
Kalandars learn to keep and earn money from a bear from their male family members (n = 102). Older family members, such as a father or uncle, taught 77.4% of kalandars. The rest identify another family member. No kalandar identified a bear trader, friend, or

neighbor as teaching them. Likewise, kalandars (n = 96) report most bears are acquired from family members (81.2%) or bear traders (12.5%). The rest are obtained from neighbors, friends, or landlords.

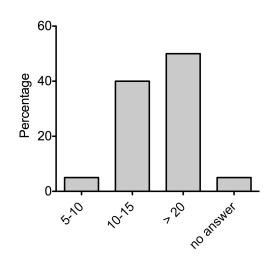
The price paid for bears varies considerably (n = 93), from a minimum of 100,000 PKR to over 400,000 PKR (1000-4000 USD). Earnings from bear performances range from 10,000 to over 20,000 PKR per month. kalandars that report higher earnings are also reporting that they use bears for both dancing and baiting. This association is quite strong. Moreover, kalandars that intensively-use their bears report higher earnings. We found no association between kalandar age and monthly earnings.

The economics of using bears is rather poor. A good earner (20,000 PKR per month) with a moderately-priced bear requires 15 months of revenue to recover the cost of the bear. This does not consider any costs associated with caring for or feeding the bear. When you consider the median reported cost of feeding a bear per month (7500 PKR), this expands to 24 months.

With respect to earnings trends over time (n = 102), responses were nearly evenly split among 26% reporting earning more money in the past compared to the present, 26% reporting no change, and 35% reporting earning more money now compared to the past. The remaining 11% did not know or did not answer. There was a significant association between earnings trends and the age of the kalandar. Kalandars under age 25 reported no change. Only 11% of kalandars over the age of 50 reported no change, and the rest were just as likely to report earning more as earning less in the past. While some kalandars



Reported price paid for bears, in thousands PKR



Reported earnings per month, in thousands PKR

between the ages of 25-49 reported no change in earnings, the rest were slightly more likely to report earning less money in the past. Of those kalandars reporting better earnings in the past, 11% reported earnings being the best 3-5 years ago, 70% said 5-10 years ago, and 19% said more than 10 years ago.

Kalandars indicate that older male family members perform or once performed with bears (n = 118). Kalandars specifically named grandfathers (93%), fathers (94%), and uncles (89%) as performing with or having once performed with bears. Younger family

members working with bears are seldom mentioned by kalandars: sons (mentioned by 4.2%) and nephews (2.4%). Only kalandars over the age of 35 mention a son or nephew. We are unable to determine whether families are giving up on the tradition of keeping bears by not teaching their younger family members. This is an open and important question worth pursuing further.

Most kalandars (n = 123) indicate they own and perform with a monkey (72%), and 80% of these individuals report earning 100-500 PKR per day with their monkeys. A percentage of kalandars (n = 77) also report owning a cow (26%), goat (18%), dog (22%), horse (10%), donkey (14%), buffalo (16%), and sheep (1%). Half of all kalandars report owning no other animals.

Very few kalandars (n = 10-12) provided information about their household, so we are reluctant to make any generalizations from this small amount of data. However, 6 kalandars reported living in a household of 2-3 people, 5 reported living with 4-5 people, and 1 reported living with more than 5 people. Only 2 of 9 households had one or more adult females listed as living in the household. The highest educational attainment of a family member was some primary school (3

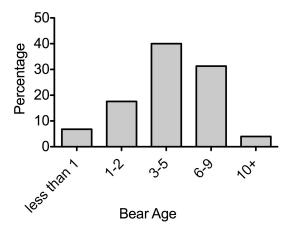
households), some secondary school (6 households, and post-secondary education (1 household). Household income per month was listed as 10,000-20,000 PKR (4 households), 20,000-30,000 PKR (2 households), and more than 30,000 PKR (2 households). While the sample size was quite small, nearly all listed household members with various professions besides displaying animals.

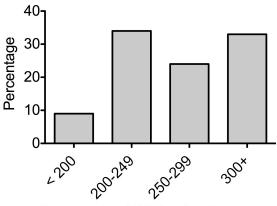
No kalandars name their bears, and none had an ownership certificate. There were 2 brown bears and 96 Asiatic black bears kept.

Most bears (77%) had never been taken to see a veterinary doctor.

Most bears were fed a diet costing less than 300 PKR per day. Kalandars spent slightly more on bears used for both dancing and baiting than they did on bears used for dancing only. Likewise, kalandars that earned more money had a tendency to spend more money feeding their bear. Kalandar age and religion was not associated with how much was spent to feed bears.

Most bears were fed bread (94%) and milk





Cost per day (PKR) to feed bear

(98%), with some bears being given fruit or jam (32%), porridge (7%), and vegetables (2%).

7. Kalandar attitudes towards bears

Nearly all kalandars believe their bears to be part of their family. Nearly all weakly (46%) or strongly (51%) disagreed with the statement that they do not consider the bear to be part of their family. The remaining 3% were not sure. Some volunteered statements about their bears, including "I love the bears more than my children" and "bears are more happy with us."

Kalandars universally believe their bears feel pain. Nearly all kalandars weakly (48%) or strongly (49%) disagreed with the statement that bears do not feel pain like humans do.

Kalandars universally believe they are are able to care well for their bears. They weakly (35%) or strongly (65%) disagreed with the statement that they do not or cannot care well for their bear. There was an important association here--kalandars that used their bear for dancing only expressed stronger disagreement than kalandars that used their bear for baiting and dancing.

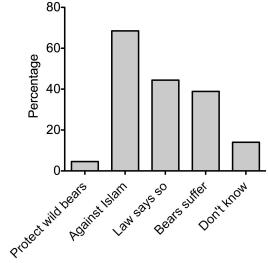
There was a general sense among kalandars that bears would be better off in the wild than bear dancing or baiting. Here, 47% strongly agreed, 44% weakly agreed, 2% strongly disagreed, and 7% were not sure.

8. Alternative livelihoods

Most kalandars (86%) stated that they knew bear baiting is illegal in Pakistan, with 11% not sure and 3% not providing an answer to the

question (n = 106). When asked why bear baiting would be illegal and given the option of providing multiple responses, the largest percentage of respondents stated that it was against Islam. This response was consistent across religious belief. However, religious belief did come into play with respect to other responses. For example, followers of Brailvi were more likely to simply restate the law "it is illegal because the law says so" whereas followers of Ahl-e-Tashee were more likely to answer "I don't know." Only 5% of respondents said they thought bear baiting would be illegal to protect bears in the wild.

When asked "If tomorrow the government would decide that keeping a bear is illegal, what would



Why would bear baiting be illegal?

you do?" the responses were confusing.

Respondents were asked to pick a single answer, but often they picked more than one answer. Options included: (1) give up my bear to the government and ask for compensation, (2) sell my bear to a trader, (3) continue performing with my bear until it gets confiscated, and (4) give my bear to an NGO and ask for an alternative income source. There were some important revelations in the data. For example, only followers of Brailvi (9%) stated they would give their bear to the government. Continuing to perform with their bear (even if it was illegal) was a more popular response by followers of Ahl-e-Tashee, with 70% stating they would do this. Only 33% of the followers of Brailvi said they would continue performing. If we examine kalandar age rather than religion, we see

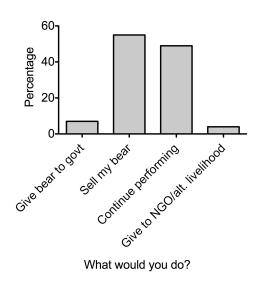
that a slight majority of most age groups would continue performing even if it was illegal. However, 70% of kalandars 50+ years old did not say they would

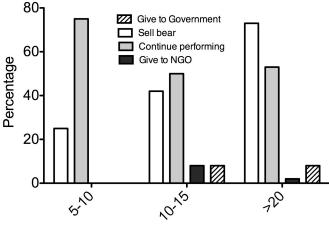
continue performing.

Current bear use also tells us something about how kalandars would react to legal changes that would make keeping bears illegal. No kalandars that use bears for both dancing and baiting would give their bear to the government. Also, 66% of all kalandars that said they would continue performing use their bears for dancing and baiting.

A majority of kalandars (73.5%) reporting the highest income levels (> 20,000 PKR per month) were more likely to say they

would sell their bear. A minority of kalandars (40%) earning less than 10,000 PKR per month said that they would sell their bear.





Kalandars responses to what they would do if keeping bears was illegal, based on monthly income (thousands of PKR)

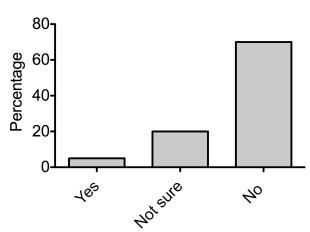
When asked if they ever heard about kalandars receiving an alternate livelihood when surrendering a bear, zero of 114 respondents said they had heard about it and knew someone who has done this. There were 67.5% of respondents who say they have heard of it but did not know anyone who has done this, and 18.4% had not heard of this. The remaining kalandars (14%) did not answer the question.

The next question asked if they knew someone who surrendered their bear and received an alternate livelihood, how that person felt. Despite no kalandar knowing someone who has done this, many responded. It is not clear if they provided responses based on rumors, or on what they imagined happened, or something else. Some may have interpreted the question as a request for general feelings about alternative occupations. We think the answer to this question is very important, though, as it reflects the hopes, fears, and beliefs of the kalandars. Some of those responses were (and many of these appeared more than once):

Most kalandars said they would not consider giving up their bear for an alternative livelihood with the same or better income. This was consistent across religious belief, kalandar age, and monthly income. kalandars that used their bears for dancing and baiting were more likely to answer "not sure" than those that used their bears for dancing only. Kalandars that said they would continue displaying bears even if it became illegal were more likely to answer "not sure" to this question.

Kalandars who responded "no" (that that they would not give up their bear in exchange for the same or better income) were permitted to give multiple reasons why they would not, and most provided multiple responses. These included "it is what I have done all my life" (74%), "I do not trust in receiving this new livelihood" (28%), "I am not sure I can make the same money with the new livelihood" (8.5%), "I enjoy my work and like my bear" (85%), and "I don't know" (1%).

Kalandar age affected some of the responses. Kalandars between 18-24 years old did not reply "it is what I have done all my life." Half of kalandars 25-34 replied "it is what I have done all my life" and the percentage rises for older kalandars.



Would you give up your bear in exhange for the same or better income?

[&]quot;There was no difference in his acts."

[&]quot;His act was worse than before."

[&]quot;Yes I have heard about the person who got a better profession, I got a better profession but I left."

[&]quot;Yes the man was happy and also happy with his new profession."

[&]quot;Yes the man was happy and also happy with his new profession. I also got an alternate profession but I left because I am not used to it."

[&]quot;Yes I got an alternate profession but I left because of less income."

[&]quot;He was not satisfied."

[&]quot;It was me. It was impossible for me to sit at one place."

[&]quot;Yes that man was happy and also happy with the new work."

[&]quot;There was not any change in that man who received it."

[&]quot;Yes he was happy."

Likewise, the oldest kalandars (50+ years) were least likely to reply that they enjoyed their work and liked their bear. Religious belief did not affect any answer. However, people who engaged in bear baiting overwhelmingly (91%) stated "I do not trust in receiving this new livelihood."

There were only 8 responses to a question about the preferred work if they were to accept an alternative livelihood. Of these, all stated they wanted to be shopkeepers. One individual also stated that they might like to work in transportation.

9. Identifying leverage points

We used a statistical technique called *classification and regression tree analysis* to identify what attitudes are most strongly associated with people's willingness to give up their bear for an alternate livelihood. We identified both kalandars that responded "yes" and "not sure" to this question. We compared characteristics of this group to kalandars that responded "no" to the question of giving up their bear for an alternate livelihood.

The strongest association we found related to the idea that baiting bears is against Islam. There were 61 individuals in the dataset meeting this criteria. If the kalandar did not believe baiting bears was against Islam, there is almost no hope of getting them to give up their bear. Within the group that believed baiting bears is against Islam, the second strongest association was bear use. Kalandars that used bears for both dancing and baiting were more likely to reply "yes" or "not sure" to giving up their bear. there were 27 individuals in the dataset that met this criteria. The third strongest association was the number of years they had kept bears overall. Kalandars who kept bears for over 10 years were more likely to reply "yes" or "not sure" than "no." There are 22 such individuals in the data set. If we examine one last criteria--how the bear was acquired--we find that 67% of kalandars who got their bear from their family might give up their bear. To summarize, the ideal candidate for surrendering their bear is the kalandar who views baiting bears as against Islam, use bears for baiting and dancing, have kept bears for over 10 years, and obtained the bear from a family member.

We can now combine this information with other data from the survey to identify campaign leverage points.

First, it is clear that *religious edicts or religious education* can be effectively used to compel kalandars to give up their bears. Our evidence is based on the large number of kalandars that associated bear baiting being illegal with being against Islam. Moreover, those associating bear baiting being against Islam were more likely to consider giving up their bear. This provides strong evidence that the religious awareness campaign conducted by the Bioresource Research Centre has been highly effective. If changes in the law are pursued that prohibit bear keeping, we believe a sustained religious awareness campaign should be conducted first. If bear keeping is perceived to be against Islam, it will be easier to develop support for the law and subsequent enforcement.

Second, *kalandars need to meet a former kalandar* that is happy in an alternative livelihood. The survey data reveal that no one personally knew someone that had an alternative livelihood. A living example will always be superior to rumors or speculations.

Third, consider creating *bear-related employment as an alternative livelihood*, ideally at a bear refuge where they have an opportunity to interact with bears. Kalandars surveyed universally consider bears part of their family and believe they care well for their bears. We think it would be quite powerful if a former kalandar had a profession where they spent some time caring for bears, and the remainder of the time traveling to conduct education and outreach with current kalandars. Another possibility would be for former kalandars to do outreach only, in conjunction with a non-bear related alternative profession.

If bear-related employment is pursued, we recommend having at least two positions, one for each religious branch represented in this survey. We repeatedly reported in attitudes or actions among the two branches. It is possible that kalandars would be more responsive to outreach from an individual within their religious in-group.

Fourth, consider increasing bear baiting enforcement pressure in districts where kalandars are not encountering resistance. However, as only about 25% of kalandars divulging the districts in which they practiced bear baiting, we cannot be sure that they are not encountering resistance in other districts as well.

APPENDIX: QUESTIONNAIRE KALANDAR

Nam	e of the surveyor:	Date :
Nam	o of the province district and village.	
Ivaiii	e of the province, district and village:	
Nam	e of the Kalandar:	ID
#:	e of the Kalandar.	ID
1**	Gender	Tick only
1	Gender	Tick only one
Α	Male	
В	Female	
2**	Which age group do you belong to	Tick only
		one
Α	Below 18 years	
В	18-24 years old	
С	25-34 years old	
D	35-49 years old	
E	50 or older	
3	Which Islamic branch are you following	Tick only one
Α	Brailvi	
В	Deobandi	
С	Ahl-e-Tashee	
D	Ahl-e-Hadith	
E	Other (Specify):	
F	No answer	
		-
4*	What is your main occupation at the moment	Tick only one
Α	Displaying animals (bear dancing, bear baiting, monkey show)	
В	Travelling salesman	
С	Shop owner	

D	Agriculture business	
E	Employed/Labour	
F	Begging	
G	None	
Н	Other (specify):	
I	No answer	

5**	Are you keeping a bear at the moment	Tick only
		one
Α	Yes	
В	No (continue from XX)	

6	What is your ownership type of this bear	Tick only
		one
Α	Owner of bear	
В	Borrow bear from relative	
С	Borrow bear from non-relative	
D	Other (specifiy):	
E	No answer	

7*	How long have you been performing with this bear?	Tick only
		one
Α	Less than one year	
В	1-3 years	
С	4-6 years	
D	7-9 years	
E	More than 10 years	
F	No answer	

8**	Since how many years have you been performing with bears overall?	Tick only
		one
Α	Less than one year	
В	1-3 years	
С	4-6 years	
D	7-9 years	
E	More than 10 years	
F	No answer	

9*	How many bears have you owned in your lifetime?	Tick only
		one
Α	1 bear	
В	2 bears	
С	3 bears	
D	More than 3 bears	
E	No answer	

10**	Are you using your bear for	Tick only
		one
Α	Bear dancing	
В	Bear baiting	
С	Bear dancing and bear baiting	
D	Other (specify):	
E	No answer	

11	Do you prefer any of these activites?	Tick only
		one
Α	I prefer bear dancing	
В	I prefer bear baiting	
С	No preference	
D	No answer	

12	Why this preference?	Tick all fitting
Α	Better income	
В	Easier work	
С	Less travel	
D	More comfortable environment	
E	Better independence	
F	Other 1(Specify):	
G	Other 2(Specify):	
Н	Other 3(Specify):	
I	No answer	

Bear baiting

13**	If your bear is used for bear baiting, how many events have you participated in in	Tick only
	the past 12 months?	one
Α	Number of events in past 12 months:	
В	I have not used my bear for bear baiting in the past 12 months	
С	No answer	

14*	, , , ,	Tick only one
Α	Rupees / event:	
В	No answer	

15	How many times does your bear have to fight during one event in average?	Tick only
		one
А	Only 1 time	
В	2-3 times	
С	More than 3 times	
D	No answer	

16	In the past 12 months in which areas did you participate in bear baiting (district and province?
А	1.
В	2.
С	3.
D	4.
E	5.
F	No answer

17	Have you ever encountered resistance from authorities against bear baiting? If yes,	Tick only
	then where.	one
A	Yes, in district:	
В	Yes, but can't remember where	
С	Never	
D	No answer	

Bear dancing

18**	How many days each month do you use your bear for bear dancing in average?	Tick only
		one
A	Number of days / month:	
В	I'm not using my bear for bear dancing	
С	No answer	

19*	How much money do you earn on one day with bear dancing in average?	Tick only
		one
А	Less than 100 Rupees / day	
В	100-300 Rupees / day	
С	300-500 Rupees / day	
D	500-1000 Rupees / day	
E	More than 1000 Rupees / day	
F	Don't know / No answer	

20	In the past 12 months in which areas did you perform bear dancing (district and province?
A	1.
В	2.
С	3.
D	4.
E	5.
F	No answer

21	Where do you prefer performing bear dancing with your bear (district and province?
A	1.
В	2.
С	3.
D	4.
E	5.
F	No answer

22	, , , ,	Tick all
		<u>fitting</u>
Α	People are rich	

В	People are generous	
С	No problems with officials	
D	People are friendly	
E	Easy to reach	
F	Other (Specify):	
G	No answer	

General

23*	Who taught you how to keep a bear and earn money from it?	Tick only
		one
Α	Bear trader/trainer	
В	Older family members (uncle, father)	
С	Other family members	
D	Friends / Neighbours	
E	Other (Specify):	
F	No answer	

24*	Where did you get your current bear from?	Tick only
		one
Α	Bear trader	
В	Family member	
С	Friend / Neighbour	
D	Other (Specify):	
E	No answer	

25*	How much have you paid for your bear		
A	Owned bear:	Rupees	
В	Borrowed bear:	Rupees/month	
С	No answer		

26**	How much money do you earn from your bear per month?			
		one		
Α	Less than 5,000 Rupees / month			
В	5,000-10,000 Rupees / month			
С	10,000-15,000 Rupees / month			
D	15,000-20,000 Rupees / month			

E	More than 20,000 Rupees / month	
F	No answer	

27*	Have you earned better or worse with your bear in past?	Tick only
		one
A	I have earned better with my bear in the past	
В	It's about the same now as in the past (SKIP NEXT QUESTION)	
С	l earn better these days than in the past (SKIP NEXT QUESTION)	
D	Don't know / Haven't had a bear for very long (SKIP NEXT QUESTION)	
E	No answer	

28	If you have earned better in the past, when was this?			
		one		
Α	1-3 years ago it was best			
В	3-5 years ago it was best			
С	5-10 years ago it was best			
D	More than 10 years ago it was best			
E	No answer			

29	Who among your family members perform or used to perform with a bear?	<u>Tick all</u> fitting
Α	Grandfather	
В	Father	
С	Uncle	
D	Son	
E	Nephew	
F	Other (Specify):	
G	No answer	

30*	Do you own and use a monkey for performances?			
		one		
Α	Yes, I own a monkey and perform with it			
В	No, I do not own a monkey.			
С	No answer			

31	How much money do you earn on one day with your monkey in average?			
		one		
A	Less than 100 Rupees / day			

В	100-300 Rupees / day	
С	300-500 Rupees / day	
D	500-1000 Rupees / day	
E	More than 1000 Rupees / day	
F	Don't know / No answer	

32	Do you own any other animals and if so what do you use them for?	
A	1.	
В	2.	
С	3.	
D	4.	
E	I do not own any other animals.	
F	No answer	

Family in household:

	Name of family members	Age	Sex	Relation to the Kalandar	Education	Primary occupation	performer?	Month ly incom e
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

34**	, ,	completel	some	really	Don't agree at all	Not sure
A	I do <u>not</u> consider my bear part of my family.					
В	Bears do <u>not</u> feel pain like humans do.					
С	l do <u>not</u> or can't care well for my bear.					

D	Bears are better off in the wild than in bear			
	dancing / baiting.			

Legal and livelihood

35*	Is bear baiting legal in Pakistan?	Tick only
		one
А	Yes, it is legal (SKIP NEXT QUESTION)	
В	Yes, it is legal but you need a special permit (SKIP NEXT QUESTION)	
С	No, it is illegal by law	
D	Not sure	
E	No answer	

36	If you think it is illegal, why would it be so?	Tick all fitting
Α	To protect bears in the wild	
В	Because it is against Islam	
С	Because the law says so	
D	Because the bears suffer	
E	Don't know	
F	No answer	

37*	If tomorrow the government would decide that keeping a bear is illegal what would	Tick only
	you do?	one
A	Give up my bear to the government and ask for compensation	
В	Sell my bear to a trader	
С	Continue performing with my bear until it gets confiscated	
D	Give my bear to a NGO and ask for an alternative income source	
E	Other (Specify):	
F	No answer	

38**	Have you ever heard about Kalandars receiving an alternative livelihood when	Tick only
	surrendering their bear?	one
Α	Yes, I heard about it and know someone who has done this	
В	Yes, I have heard about it but do not know anyone who has done this	
С	No, I have never heard about it	

D	No answer	

39*	If you know someone who has received an alternative livelihood for giving up their		
	bear, how do they feel?	one	
Α	This person seems very happy and successful with his new work		
В	This person seems to do similar to when he had a bear		
С	This person seems to do worse than before.		
D	l don't know.		

40*	Would you consider giving up your bear in exchange for a livelihood that provides	Tick only
	you the same or better income?	one
Α	Yes, I would definitely consider this.	
В	I'm not sure if I would consider this.	
С	No, I would rather keep my bear	
D	No answer	

41*	If NO (in 40), then why would you rather keep your bear?	
		<u>fitting</u>
Α	This is what I have done all my life	
В	I don't trust in receiving this new livelihood	
С	I'm not sure whether I can make the same money with the new livelihood	
D	I enjoy my work and like my bear	
E	I don't know why	
F	No answer	

42	If YES (in 40), then what would be your preferred work?	Tick all fitting
A	Livestock owner	
В	Agriculture business	
С	Shop owner	
D	Manufacturer (Garments, bangles)	
E	Transport (Rikshaw)	
F	Other (Specify):	
G	Don't know / No answer	

_	_	-	-
Data	:10	~ f	bear
11012	115	()	near

years	Name of your b	ear: Gender:		Ag	e:
	Bear species:	Brown bear	Asiatic Bla	ck Bear 🗆	Sloth Bear □
	Do you have an	ownership cert	ificate?	(YES/NC))
	Daily cost of fee	eding your bear:			Rupees
	Have you ever	taken your bear	to a vet?(Y	ES / NO)	
	Common diet y	ou give to your			
bear:					