

Introduction to PRICE's ICE 360° Surveys:

Providing a View of India's Consumer Econom & citizen Environment Through the Household/People Lens (ICE 360° Surveys, 2014, 2016 and 2021)

Survey Methodology and Execution

People Research on India's Consumer Economy (P.R.I.C.E.) (A not-for-profit fact tank and think tank) www.ice360.in ICE 360° Surveys: Objectives



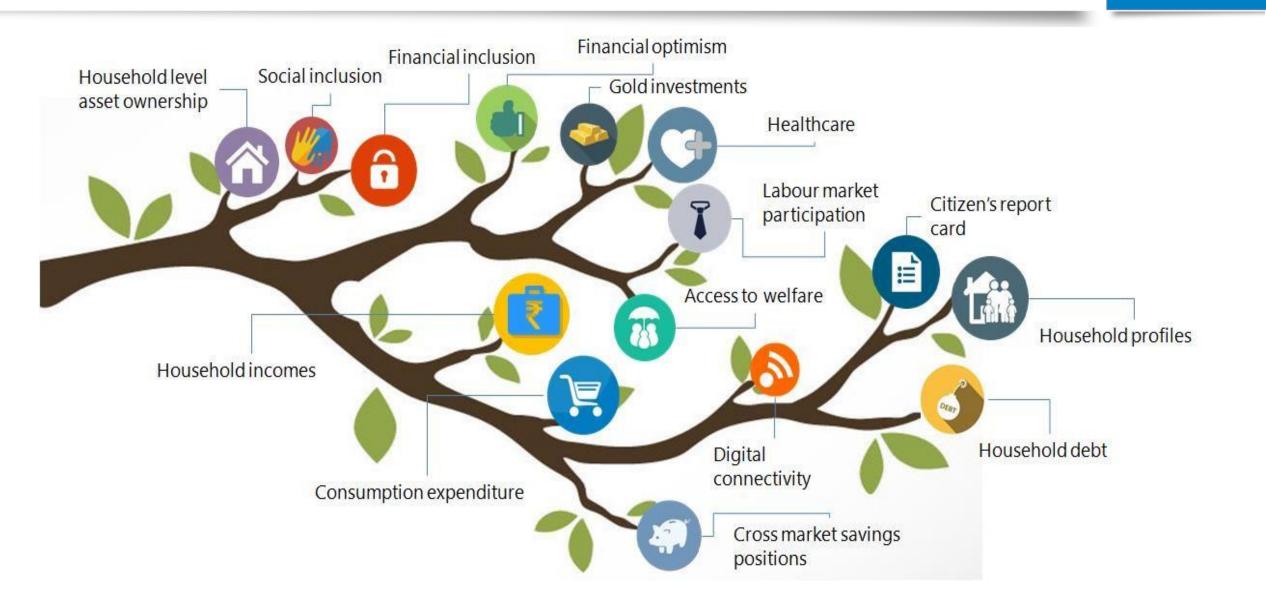
ICE 360° Surveys, the core activities of PRICE...

...aimed to "generate integrated longitudinal data (Interconnected, Consistent and up-to-date) on "How India earns, spends, saves, lives, thinks, accesses public goods and amenities and many more..."

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... to provide a 360° view of "household's & people's" progress on financial conditions, living conditions, access to public goods, amenities, state welfare, health, education, occupational conditions, social and occupational mobility and inclusion in the market economy.

ICE 360° 2021: Broad Thematic Areas



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360°

Specific Agenda: ICE 360° Surveys

- Serving business, policy and research entities
- Meeting needs for **Consumer insights**
 - information & insights, trends & tracking, projections
 - the Indian consumer landscape and market structure
- "State of the nation" dashboard
 - Financial health of Indian households: (Income, Expenditure, Savings, Investments, borrowing & debt, Assets, etc)- Quantum, patterns, changes over time; P&L and Balance Sheet of households
 - Occupation and livelihood (how Indian households earn): detailed occupation mapping, patterns within households, nature of "formality", time utilisation (disguised unemployment)
 - Quality of living: Access to amenities, ownership of durables, nature of housing, access to public goods and welfare, Health status and expenditure and use (patterns) to sources of health care,; Comprehensive Development index
 - Inclusion: Financial inclusion, digital profile and usage, banking and digital payments behaviours, old age, financial security, social inclusion, Social mobility intergeneration and over time.
 - Access to public goods: Basic amenities, DBT, quality, access, and use; welfare programs, impact.
 - COVID related damage and Indian Consumer Sentiments
- Riders: Household gold investment (WGC), 2-wheeler (TVS), Car (Maruti), Banking (ICICI), etc.
- Maintaining continuity with previous data sets as feasible to ensure comparability & trend data availability

Specific Objectives & Designs : ICE 360° Surveys



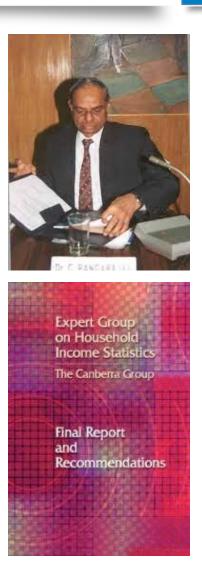
| Key constructs | Primary outcomes | Derived understanding |
|--|------------------|--|
| Income :level, sources, expectations, etc. | | Income, Demand projections/class |
| Spending: Assets, savings, products /service basket | | Modelling demand, income, market structure, lifestyle segments, wellbeing, |
| Borrowing & debt; level, sources, liabilities | | financial inclusion, etc. |
| Buying methods, digital usage | | |
| Age, gender, occupation, education, family size, stage | | Projections of market structure changes; Drivers of market structure; trending |
| Aspirations, orientation, commitments, liabilities | | |



Measuring income, Expenditure and Saving

Conceptualization: National and International Best Practices

- NSS (India) 9th Round (1955); 14th Round (1958-59); 19th Round (1964-65)
- Expert Group on household income statistics: The Canberra Group
- NCAER All India Household Survey on Saving, Income and Investment (1962), REDS (1971, 1981, 1999, 2006), MIMAP (1995), Human Development (1994, 2005), MISH since 1985
- Household Income and Expenditure Statistics, ILO
- Chinese Household Income Project 1995
- P.R.I.C.E. (ICE 360⁰) Pan India Surveys 2014 & 2016



Lesson Learned

- Weinberg (1999) examined the income components collected by a variety of countries and showed that it is next to impossible to quantify all elements of income.
- In rural areas, reported incomes on the average lower than consumption. In urban areas, the results were opposite.
- Exclusion of imputed values of receipts
- Problem in data collection due to seasonality effect, lack of availability of accounts from employer households, hidden income generated through wages paid in kind, etc.

P.R.I.C.E Income Measurement

- **i@e** 360°
- Survey designed specially to measure household income based on experience in 30 countries (Canberra studies, Weinberg 1999) covering all continents, NSS estimation, used in NCAER and in ICE 360.
- Cover 56 elements of income (106) through 14 major occupations through following major income components

| Components of income | | |
|---|---------------------------|--|
| 1. Wages and salaries - main job | 6. Interest and Dividends | |
| 2. Wages and salaries - other job | 7. Pension and Bonus | |
| 3. Farm self-employment income | 8. Remittances | |
| 4. Non-farm self-employment income | 9. Rental income received | |
| 5. Labour - agriculture & non-agriculture | 10.Welfare schemes | |

- Debt and borrowings
- Specific questions (detailed probing) to each occupation category
 - Salaried: annual salary, bonus, PF, income tax paid, gratuity...
 - Labour: Number of days worked in a year, wage per day...
 - Agriculture: Land ownership, cultivable land...

P.R.I.C.E expenditure Measurement



| HOUSEHOLD EXPENDITURE | | |
|---|--|--|
| Routine | Non-routine | |
| i. Food & Beverages: At home and dine out; ii. Living: Housing, Energy, Durables; iii. Connectivity: Communication & Transport; iv. Consumer services: HH services, baby care and misc. services; v. Well-being: Education, Health & fitness, toy & baby care; vi. Looking good: Apparel, Personal care, fitness; vii. Fun & Entertainment: Recreation, Travel, Media viii. Consumer durables ix. Many more | i. Real estate (House/flat/plot, etc) ii. Upgrade/major repairs in the house/home furnishings iii. Agriculture land iv. Automobile (Car/ SUV/TWs) v. Large household appliances (TV/Fridge/WM/ACs) vi. Health care (Expenses on hospital stay and treatment for, if any, other services excluding insurance) vii. Education (Pay for higher education) viii. Social events (Spending for a marriage/other social occasions in the family) ix. Tour and travels (A holiday trip) x. Any other (such as electronic gadgets, luxury fitness and sports equipment/services, etc.) | |

Other important indicators

- Quantity and value
- Source (Home produced, Purchased from open market, Received from Govt./State govt., 4-Others)
- Share of online purchase

P.R.I.C.E saving/investment Measurement

- Amount of savings and investments portfolio of the household (Cash, Banking instruments, Capital market, Life Insurance, Informal savings, Gold & Jewellery, Other physical assets)
- Opinion on the best investment option and its reason
- Decision makers and consultations
- Satisfaction level
- Intention for future investment
- Many more...

Analyses will be done by different sub groups of households based on per capita income quintile (Rich vs Poor), occupation categories (Salaried, self-employed, agriculture, labour, etc.), education (low vs high literate), geography (urban / rural, metro / small towns/ developed rural/ under-developed rural, etc.) and so on.



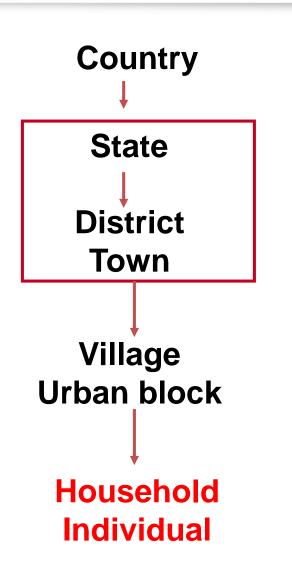
ICE 360 Surveys: Survey Approach & Methodology

ICE 360° Survey Features



- Best mix of Baseline-Panel-Longitudinal-Cross-sectional
- Using stratification and probability sampling to generate representative samples
- Sample size is determined on the basis of the accuracy required and the resources available
- Standard survey principles and procedures such as a good survey design, well-designed survey instruments, using reliable sample frame, proper implementation field work, robust data cleaning and analysis will be undertaken to minimize sampling and non-sampling errors.
- Non-response is controlled by conducting focus group, proper training of interviewers and supervision.
- Components of income, expenditure and saving is collected from head (accrue to the household as a unit) and individuals (accrue to individuals)
- In addition to household data, data on demographic profile of all household members will be collected

ICE 360° Survey: Stages of household Selection



- Information is not available for households or individuals at the country/state level.
- Need to select part of the districts within state

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- There is no information available on the households or the individuals at the lower levels in the sampling frame (e.g. Town or Village),
- Perform a census of the village and select households or select every household,

ICE 360° 2021: Features & allocation



| Parameters | Sample size and spread | Sampling method | |
|--|--|---|--|
| Coverage | 25 Indian states (Rural & Urban) , 105 districts, 722 villages, 121 cities/ towns, 1200 urban blocks | Three-stage stratified | |
| Sampling frame (Construction interview) | 2, 00,000 households | random sampling | |
| Sample size & detailed interview | 40,000 households Rural: 16,000 HHDs- 722 villages-105 districts Urban: 24,000 HHDs-1200 urban blocks-120 towns | Rural: District - Villages - Households Urban: Towns - USF blocks - Households | |
| Method of data collection | Face-to-face interview (CAPI) | | |
| Respondents | Head of the households, CWE & Housewife | - | |
| Reference period | Calendar year - 2020; Jan-April 2021 | | |
| Survey period | October 2020 - March 2021; June-Aug. 2021 | | |
| Level of reporting | rural, developing rural and under-developed rural) Level 3: Million+ cities/urban agglomerations) Level 4: Demographic profile (Education, occupation, a | evel 2: 7 settlement typologies (metros, boom towns, niche cities and other towns; developed Iral, developing rural and under-developed rural) | |

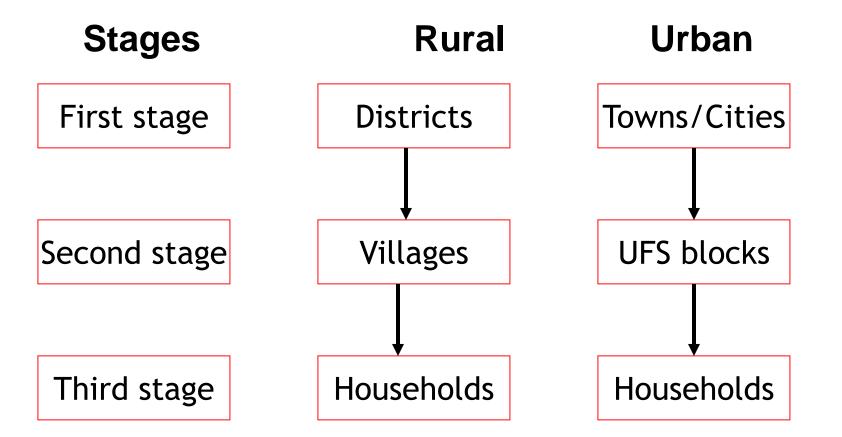




| Regions | States (25) | |
|---------|--|--|
| North | Chandigarh, Delhi, Haryana, Himachal Pradesh, Punjab, Uttaranchal and Uttar Pradesh | |
| South | Andhra Pradesh, Karnataka, Kerala, Pondicherry and Tamil Nadu | |
| East | Assam, Bihar, Jharkhand, Meghalaya, Orissa and West Bengal | |
| West | Daman & Diu, Goa, Gujarat and Maharashtra | |
| Central | Chhattisgarh, Madhya Pradesh and Rajasthan | |

Choice of Sample Design (Three-stage stratified random sampling)

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Selection of Rural Sample



First stage (Districts)

 Pre-determined number of districts will be selected independently within each state/region using probability proportional to size (PPS) technique.

Second stage (Villages)

- Independently in each sample district
- Method of selection: Systematic Random Sampling
- Number of sample villages per district: 5-10 depending on district population

Selection of Urban Samples

First stage (Cities/Town)

- Pre-determined number of towns will be selected independently within each state/region using probability proportional to size (PPS) technique.
- Census urban population will be considered as the measure size i.e. larger towns have higher probability to be in sample.

Second stage (Urban Blocks)

- Independently in each sample town
- Method of selection: Urban blocks covering all major wards through systematic random sampling



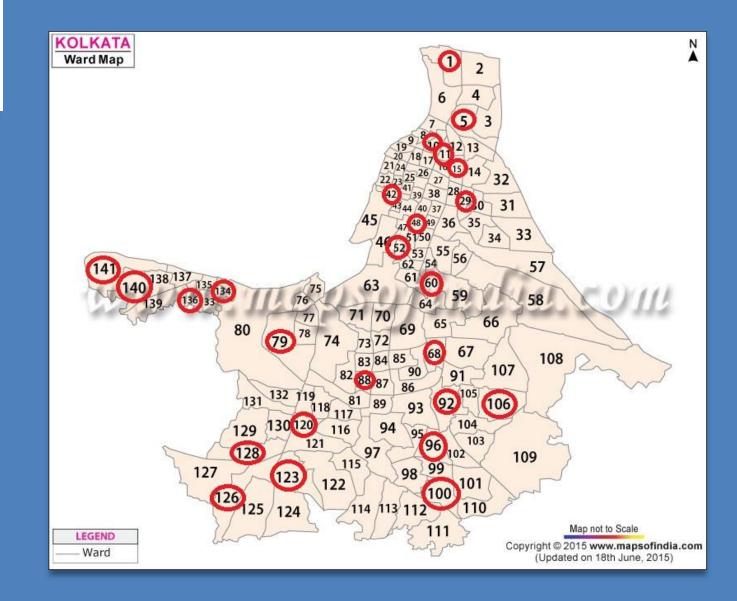
Selection of Urban Samples

First stage (Cities/Town)

- Each town groups (Tier I/II/III/IV) will be considered as separate strata independently in each state/region.
- A progressively increasing sampling fraction with increasing town population class will be used to determining the number of towns to be selected from each stratum.
- Pre-determined number of towns will be selected independently within each state/region using probability proportional to size (city urban population) technique.

Second stage (Urban Blocks)

- Independently in each sample town
- Use UFS map prepared by PRICE
- Method of selection: Urban blocks covering all major wards through systematic random sampling



Development of Sampling Frame



- Ready made frame for first two stages are available, but for the third stage Sampling Frame will be developed by listing households in each village/urban block using Listing proforma
- Within a selected village/urban block, a maximum of 100 households will be listed to develop the sampling frame required for stratification
- Broadly following information on indicators (15) will be used for selection of households such as
 - Household composition: Household size, earning members, unmarried youth.
 - Economic profile: Highest education, primary source of income, annual income & expenditure, ownership of agriculture land.
 - Information about the last purchase of automobile (Car and 2-wheelers)

Stratification Criteria



| Indicators | Range | Scoring | Indicat |
|------------------------------------|--|---------|-------------|
| | <= 25% | 2 | |
| Annual household | >25% & <= 50% | 4 | |
| income | >50% & <= 75% | 6 | Cultivable |
| | > 75% | 8 | acres (Rura |
| | <= 25% | 2 | |
| Annual Household | >25% & <= 50% | 4 | |
| Expenditure | >50% & <= 75% | 6 | |
| | > 75% | 8 | Ownersh |
| Highest Education in the household | Illiterate | 0 | Vehic |
| | Below Primary | 2 | |
| | Primary | | |
| | Nocondary North No | | |
| | Higher Sec/ Diploma | 6 | Number of |
| | Graduate n above | 8 | |

| Indicators | Range | Scoring |
|---------------------------------------|---------------|---------|
| | 0 acres | 0 |
| Cultivable Landin | 0-2 acres | 2 |
| Cultivable Land in acres (Rural only) | 2-4 acres | 4 |
| | 4-10 acres | 6 |
| | >10 acres | 8 |
| | No vehicle | 0 |
| Ownership of | Moped | 2 |
| Vehicle | MC | 4 |
| | Car/ Jeep/SUV | 8 |
| | 1 | 2 |
| Number of corners | 2 | 4 |
| Number of earners | 3 | 6 |
| | >=4 | 8 |

Stratification & Selection of Households



| | Major Source of HHD Income | Household well-being score | | | |
|-----|------------------------------------|----------------------------|---------|----------|---------|
| | Major Source of HHD Income | 0-0.25 | 0.2550 | 0.5075 | >0.75 |
| RAL | Self-employment in agriculture | ST - I | ST - II | ST - III | ST - IV |
| RUI | Labour (agricultural/other casual) | ST - V | | | |
| - | Self-employment in non-agriculture | ST -VI | | ST - VII | |
| | Regular salary/wages | ST -VIII | | ST | - IX |
| | Others (Remittances/Pension etc) | ST - X | | - X | |

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| Major Source of HHD Income | | Household well-being score | | | |
|----------------------------|------------------------------------|----------------------------|---|----------|----------|
| | | 0-0.25 | 0.2550 | 0.5075 | >0.75 |
| | Regular salary/wages | ST - I | ST - II | ST - III | ST - IV |
| | Self-employment in non-agriculture | ST - V | ST - VI ST - VII ST - IX ST - VII | | ST - VII |
| | Casual labour | ST - VIII | | | |
| | Others (Remittances/Pension etc) | ST - X | | | |

Sample size & its allocation



| Location | Sampling Units | Total annual sample |
|-----------|----------------------------|------------------------|
| | Districts | 105 |
| Dural | Villages | 722 |
| Rural | Sampling Frame -Households | 77,699 |
| | Main Survey -Households | 14,704 |
| | Towns/cities | 121 |
| Urban | Urban blocks | 1,222 |
| Urban | Sampling Frame -Households | 124,201 |
| | Main Survey -Households | 25,723 |
| | Districts | 165 |
| All India | Villages/urban blocks | 1,944 |
| All India | Sampling Frame -Households | 201,900 |
| | Main Survey -Households | 40,427 |



Survey Execution

(E-Survey: Paper less survey using CAPI techniques)

Sequence of Tasks

Task 1: Setting up the infrastructure

Task 2: Laying down the mandatory process to be followed

- Questionnaire Designing on Survey Management Website
- <u>Translation in local languages</u>
- Survey instrument Published on Web Server

Task 3: Mobilizing and training field manpower

- Field profile requirement
- Mobilizing the field teams
- <u>Training of field manpower</u>
- Questionnaire downloaded by field teams
- Pilot Survey

Task 4: Primary survey

- Primary survey and task distribution
- Supervision and monitoring

Task 5: MIS and database management

- Data cleaning
- Calculation of weights

Task 6: Imputation and Estimation

Survey implementation

- Independent team in each region/state
- Letters to/from CS, DMs, PRICE, IIMA and Local authorities
- Each team of 5 Ris + 1 Supervisor

Qualification of Field forces

- Locally recruited, mix of M/F
- Knowledge of local languages
- Graduate+ having 3-5 yrs. Experience
- Able to handle CAPI
- One Central training of trainers (ToT) 5 Days

(By PROJECT LEADER & IT Professional)

- Price team (Core + IT)
- National Field Head
- Regional Coordinators
- State Coordinators
- <u>Six Regional trainings 5 Days</u>

(By PRICE research team & IT Professional)

- Regional Coordinators
- State Coordinators
- Supervisors
- Research Investigators



Efficient Approach and Innovations

- Deployment of CAPI (Computer Assisted Personal Interviews) approach, technology and process to facilitate better quality data/information.
- A versatile software will be developed which have necessary checks, filters and skipping instructions.
- Realtime access the canvassed data
- Easy and efficient supervision
- Photograph of the respondent will be taken.



Survey implementation



- PRICE has executed the study under the overall guidance of a core group expert called Academic & Technical Advisory Committee (ATAC) from academicians, policy makers and technical experts who provided their inputs to set the work agenda and provide intellectual direction to the study.
- Engaged a team of research investigators (175), supervisors (30), state coordinators/ professionals (6) and HQ (5)
- Central training of trainers (Delhi) and 14 regional training
- Independent team in each state
- Letters to/from CS, DMs and other local authorities

Special fieldwork checks on account of pandemic

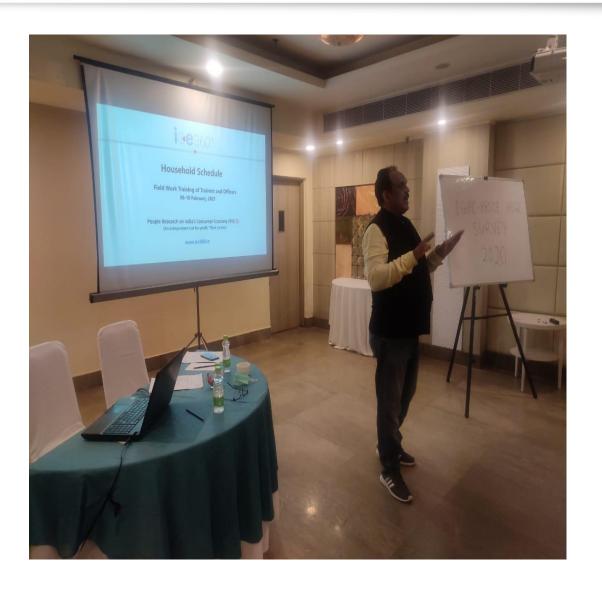
We were concerned when planning the survey of the possibility of different refusal rates in different parts of the population because of different incidences and responses of different population segments to Covid, thus resulting in the Sample Frame that we construct not being not an accurate representation of "All India".

Therefore, in addition to normal precautions like ensuring that survey locations demonstrated the required level of openness before scheduling the survey, we also tracked refusal rates at a micro location level to see if there was any unusual pattern we were noticing which would require us to take a call on using the data from the location.

Finally, we compared the data of the 2021 sample with the 2016 sample on slow changing structural characteristics like Chief Wage Earner occupation and education to see if there was any obvious skew in the sample frame of 2,17,965 households that we constructed.

Training of trainers & regional trainings









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MARK NO.

ICE 360 PAN India Household Survey, 2020-For kind information and request for support

From : pooja sharma <pooja.sharma@ice360.in> Sender : pooja sharma <pooja.sharma@ice360.in> Subject : ICE 360 PAN India Household Survey, 2020-For kind information and request for support To : Igbal Singh Bains <cs@mp.nic.in>

Dear Sir/Madam,

People Research on India's Consumer Economy (PRICE) is an independent, not-for-profit "Think Tank" and "Fact Tank' to provide the "household and people-level" single window' view on Indian Citizens" Environment and Consumer Economy.

PRICE is undertaking a primary data based two PAN India the survey "ICE 300⁰ Survey, 2020: Household Survey on India's Citizen's Environment and Consumer Economy (Wave 3.0)" and "Household Survey on Gold Consumption" (sponsored by the India Gold Policy Center (IGPC) at Indian Institute of Management (IIM), Ahmedabad, refer attached letter from IIMA.

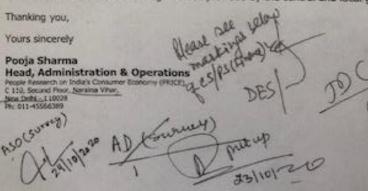
The study is planned to undertake a nationwide household survey to collect the information on the robust estimation of the household troke <u>Account</u> conting, and sinkings and collect the information on <u>robustmittion</u> of gold and other related aspects from 40.000 induit households collecting 25 Induit states and unline territories. The collected information will be exclusively used in building and disseminating knowledge which enables evidence-led policy formulation and regulatory response. The list of account of your state is provided in the attached letter.

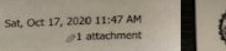
The internation obtained from this sorvey will be used without identifying individuals or households and the respondent's name and other identifying information will be kept confidential and retained by PRICE. The interview is voluntary.

The field staff of PRICE and State Networking Ag nesis will be deployed to collect primary information from selected households in the sample villages and urban localities during October-March, 2021.

It would be highly appreciated if you could direct your office to send instructions to the concerned District Magistratus and other officials to extend the necessary cooperation to the field research teams in collecting the primary data for the study during their visit. In this regard, we are also informing the concerned district officials for their cooperation and support.

It is also important to mention that PRICE is taking all precautions about the health and hygiene of Research Investigators and Supervisors by starting from COVID tests of all field manpower at the time of recruitment, providing a kit containing masks, sanitiser and desired medicines with strict instructions to follow the official guidelines provided by the central and local government.







पति.

आर्थिक एवं सांखियकी संचालनालय, मध्यप्रदेश भू-तल, विन्ध्याचल भवन, भोपाल पिन-462004

क्रमांक 4637 /2020/आसांस/7-सां.सं.

ओपास, दिसांक 6 /10/2020

email.des_mp.gov.in Phone: 0755-2551125

,कलिक्टर बाताधाट, भोपाल, छतरपुर, गुना, ग्वालियर, होशंगाबाद इंदौर, झाबुआ कटनी एवं सतना

मण्यप्रदेश

विषय : ICE 360 PIN India Household Survey 2020 - For kind information and request for support. संदर्भ : India's Consumer Economy, नई दिरुसी का पत्र दिनांक 16 अक्टूबर, 2020 1

कृपया उपरोकत विषयांकित संदर्भित पत्र का अवलोकन करने का कष्ट करें। जिसके द्वारा विषयांकित कार्य हेतु राज्य नेटवर्किंग एंजेन्सी एवं Indisa's Consumer Economy (PRICE) द्वारा मध्यप्रदेश के घयनित जिलों के यामीण एवं नगरीय क्षेत्र में सेम्पल आधार पर अक्टूबर 2020 से मार्च 2021 के मध्य सर्वेक्षण कार्य किया जाना प्रस्तावित है। उक्त सर्वेक्षण कार्य में परिवारों के आग, व्यय, बजट, मोल्ड एवं आमूषणों से संबंधित विषय पर जानकारी एकप्रित की जाना है। संस्था ने उक्त सभी जानकारी एवं अल्य पहचान को गोधनीय रक्षा जाने का आश्वासन दिया है।

कृपया आपके जिले में संबंधित संस्था के सर्वद्याणकताओं को सर्वद्याण कार्य में आवश्यक सहयोग प्रदान करने हेतु संबंधित अधिकारियों को निर्देशित करें ।

> (आद/ एस. राठौर) आयुक्त आयिक एवं सांखियकी क्रु. मध्यप्रदेश भोपाल, दिनांक 6 /1\$2020

4638 इ.स्मांच /2020/आसांस/7-सां.सं.

पतिलिपि :

(1) स्टाफ आसीसर, मुख्य सविहत, मध्यप्रदेश शासन, मंत्रासव, वत्स्सम भवन, मोपास।

(2) स्टाफ आपीसर, प्रमुख सचित्र, मध्यप्रदेश शासन, मंत्रालय, दल्लम अवन, भोपाल।

(3) संयुक्त संपालक, लंभागीय बोजना एवं साहित्यकी कार्यालय, सोपाल, ग्वालियर एवं इंटीर नग्रयप्रदेश बंध और आवश्यक कार्यवाही हेत् देवित।

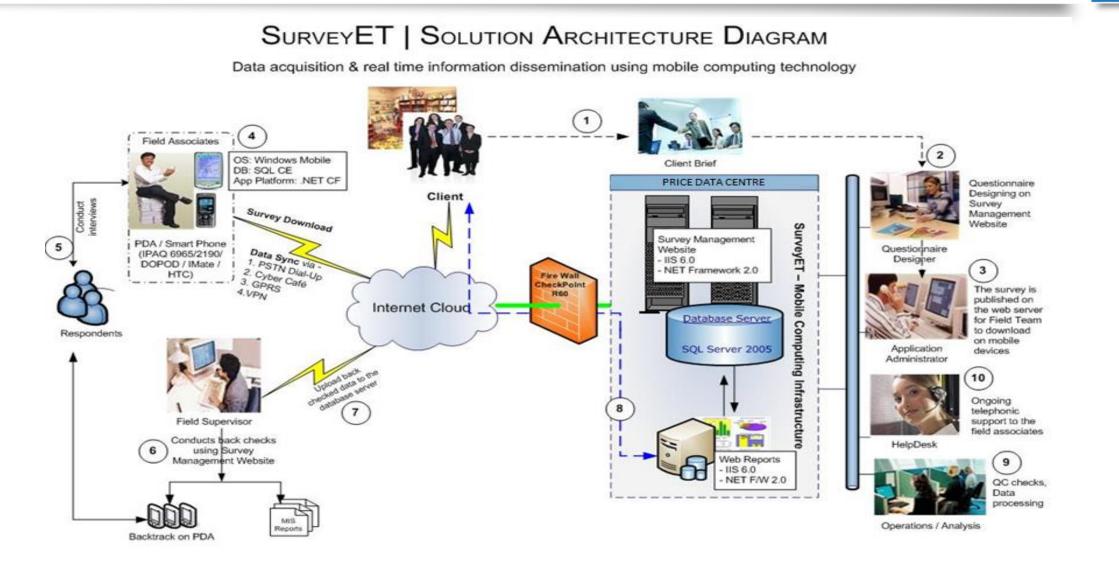
(4) फिला बोजना अधिकारी, फिला बोजना एवं सांडियकी कार्यालय, बालाधाट, छतरपुर, गुना, होशंशाबाट, इताबुआ, कटनी एवं सताना स्व-मार्ट्स की ओर आवस्यक कार्यवारी हेतु देवित।

(5) 관력 및해 학자, Head, Administration & Operations, People Research on India's Consumer Economy (PRICE), C-110, Second Floor, Namina Vitari, New Debi - 810028-47 str sigtifier up Reser 16 대한 17 second 2020 & sight & square difer; i

> संयुक्त संग्रासक आदिन एवं साहितवर्थ संवालस्यालय,

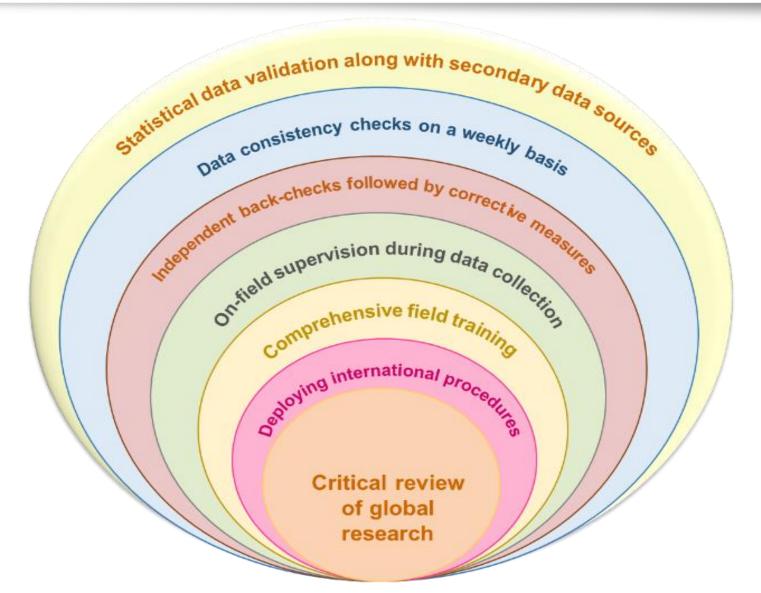
Survey Process

i@e 360°



Quality assurance and evaluation

i@e 360°





- **i@e** 360°
- Truly representative of India most robust PROBALITY sample design.
- Rigorous and transparent sample, design sampling methodology and measurement metrics: No black boxes, no data "adjustments".
- Over the rounds, survey approach and methodology were constant, so results are comparable over time.
- Research not reportage: cross analysis holds the key to discovering insights.
- "Why do we want to know" issue focus not "what all shall we ask" factoid focus
- ICE 360 surveys data compares reasonably well with NSS, Census and other reliable sources of data for a number of key variables

Thank you

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People Research on India's Consumer Economy

A not-for-profit Research Centre www.ice360.in

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