Chapakharka Village

Environment	Economic	Social
Water Availability Effective mobilization of natural water through canals / pipes	**Economic Wellbeing** Better access to development infrastructure such as electricity and drinking water	**Community Support** No significant changes to community-based support
Soil Quality Sporadic use and attitudes towards the use of chemical fertilizers	**Access to Food** Sufficient access to markets to buy food for consumption	**Outside Support** Lack of governmental and institutional extension services
Crop Yields Extreme decline of yields because of wild boars and soil degradation	**Market for Selling** Lack of interest for commercial farming	**Farming Knowledge** Open to new technology for farming (such as power tiller)
Urban Changes Positive response to urban changes such as roads and modern houses	**Farming Costs** Increased farm costs due to higher wages	**Future of Farming** No future potential because of limited profit and land availability

Response to Survey

Population: 200
Farming: approx. 50

Farmers Surveyed: 18 (36%)

1	Very Good	2	Good	3	No Change	4	Bad	5	Very Bad

Water Availability	Soil Quality	Crop Yield	Urban Changes	Economic Wellbeing	Access to Food	Market for Selling	Farming Costs	Community Support	Outside Support	Knowledge in Farming	Farming as a Job
3	2	5	2	1	3	3	4	4	4	2	5
2	2	4	1	1	2	3	3	3	3	2	5
3	3	5	2	2	2	2	4	4	5	4	4
3	2	4	3	1	2	3	4	4	3	3	5
2	3	4	2	2	2	3	4	3	4	4	4
2	3	5	1	2	3	3	4	3	4	2	5
2	4	5	2	2	2	2	4	3	4	3	3
3	3	4	2	3	2	3	3	3	4	1	4
2	4	5	1	1	2	3	4	3	4	4	5
2	3	5	2	2	2	3	4	3	5	4	5
2	3	5	1	1	3	2	3	3	4	3	3
2	2	4	2	2	2	3	4	4	4	4	4
2	3	4	2	1	2	3	4	4	4	3	5
2	3	4	1	2	2	3	4	4	3	2	5
2	2	4	2	2	2	3	4	3	4	2	5
2	4	5	1	1	3	3	4	4	4	4	4
2	4	5	2	1	2	3	4	3	5	2	5
2	3	5	1	1	3	3	4	3	4	4	5

Shantiban Village

Environment	Economic	Social
Water Availability Disproportionate access to water	**Economic Wellbeing** Better access to basic health, education, and energy facilities	**Community Support** Declining because of shift towards non-farm livelihoods
Soil Quality Concerned about the increasing use of chemical fertilizers	**Access to Food** Sufficient access to markets to buy food for consumption	**Outside Support** Limited governmental and institutional extension services
Crop Yields Declining as a result of limited availability of land	**Market for Selling** Land area limited for commercial farming	**Farming Knowledge** Open to new methods for farming (such as pest management)
Urban Changes Positive response to urban changes such as roads and communication facilities	**Farming Costs** Increased farm costs due to higher wages, rent fees, and equipment costs	**Future of Farming** No future potential because of limited profit and land availability

Response to Survey

Population: 600
Farming: approx. 150

Farmers Surveyed: 17 (11%)

1	Very Good	2	Good	3	No Change	4	Bad	5	Very Bad

Water Availability	Soil Quality	Crop Yield	Urban Changes	Economic Wellbeing	Access to Food	Market for Selling	Farming Costs	Community Support	Outside Support	Knowledge in Farming	Farming as a Job
2	3	3	1	1	2	3	3	4	4	2	4
2	5	5	4	2	3	2	4	4	4	4	5
4	3	3	2	2	3	3	4	3	3	2	4
4	2	4	2	1	4	3	4	5	5	4	3
2	3	4	2	2	2	3	3	3	4	2	4
3	3	4	1	2	2	3	3	2	3	2	5
4	3	5	2	2	3	3	4	3	4	3	5
2	4	5	4	2	3	3	4	3	4	4	4
4	3	4	2	1	3	3	4	4	4	4	5
4	4	4	2	1	2	3	4	2	3	3	5
4	4	3	1	1	4	3	3	3	4	1	5
3	5	4	1	2	3	3	3	3	4	4	4
4	3	3	2	2	3	3	3	3	2	4	4
3	3	3	1	2	2	3	4	2	3	2	4
2	4	4	3	2	2	2	3	4	4	2	5
4	5	4	2	1	2	3	4	4	3	2	5
3	4	3	2	1	2	2	4	3	2	2	3

Sisneri Village

Environment	Economic	Social
Water Availability Disproportionate access to water	**Economic Wellbeing** Better access to basic health, education, and energy facilities	**Community Support** Declining because of a lack of engagement in farming
Soil Quality Mixed use of organic and chemical fertilizers	**Access to Food** Increased number of local markets	**Outside Support** Inadequate support and response from government
Crop Yields Mixed results due to different approaches soil management	**Market for Selling** Few farmers engaged in commercial farming	**Farming Knowledge** Skeptical about modern agricultural innovation (pesticides / chemical fertilizers)
Urban Changes Concerned about urban pollution and unmanaged urban sprawl	**Farming Costs** Increased farm costs due to higher wages, rent fees, and equipment costs	**Future of Farming** No future potential because of inadequate policy support

Response to Survey

Population: 400
Farming: approx. 100

Farmers Surveyed: 18 (18%)

1	Very Good	2	Good	3	No Change	4	Bad	5	Very Bad

Water Availability	Soil Quality	Crop Yield	Urban Changes	Economic Wellbeing	Access to Food	Market for Selling	Farming Costs	Community Support	Outside Support	Knowledge in Farming	Farming as a Job
2	2	3	5	1	2	2	4	5	4	2	5
4	3	2	4	2	2	3	3	4	3	4	5
2	4	3	4	2	2	3	4	4	4	4	5
2	4	3	5	2	2	2	3	4	5	5	5
2	3	2	3	1	2	3	4	3	3	2	4
4	4	3	2	2	3	3	4	3	3	4	4
4	2	4	4	2	2	2	3	2	3	4	5
3	3	2	4	1	2	3	4	3	3	5	4
4	2	2	4	2	2	3	4	4	4	4	5
2	3	3	4	2	3	2	4	4	4	4	4
3	4	2	2	2	3	3	3	3	3	4	5
2	4	4	3	2	2	3	4	4	5	4	5
1	2	3	3	1	2	3	3	3	3	4	4
3	2	3	4	1	2	3	4	2	4	4	4
4	4	4	5	2	2	3	4	3	5	5	5
3	2	2	4	2	3	3	4	4	4	4	5
4	3	3	2	2	3	2	3	3	4	4	4
2	4	3	4	2	3	3	3	4	4	5	5

Khokana Village

Environment	Economic	Social
Water Availability Good because of natural water and irrigation cannels	**Economic Wellbeing** Better access to basic health, education, and energy facilities	**Community Support** Declining because of a lack of interest from new generation
Soil Quality Mixed use of organic and chemical fertilizers	**Access to Food** Increased number of local markets and food options	**Outside Support** Training support from government for compost fertilizers and seed management
Crop Yields Decreasing because of limited engagement of farmers	**Market for Selling** Few farmers engaged in commercial farming	**Farming Knowledge** Unsure about the effectiveness of modern farming practices
Urban Changes Concerned about unplanned urban sprawl	**Farming Costs** Farmers willing and able to invest in new agricultural methods	**Future of Farming** No future potential because of a lack of interest from younger generations

Response to Survey

Population: 1500
Farming: approx. 200

Farmers Surveyed: 15 (7.5%)

1	Very Good	2	Good	3	No Change	4	Bad	5	Very Bad

Water Availability	Soil Quality	Crop Yield	Urban Changes	Economic Wellbeing	Access to Food	Access to Markets	Farming Costs	Community Support	Outside Support	Knowledge in Farming	Farming as a Job
4	3	3	4	1	2	3	4	3	3	4	4
3	2	3	1	1	2	3	3	4	3	4	4
2	3	3	4	2	3	3	2	2	2	4	5
2	4	4	4	2	2	2	3	3	2	3	5
2	4	3	3	2	2	3	3	4	2	5	4
2	2	4	3	2	3	3	4	3	3	2	3
2	4	4	2	1	2	3	3	3	4	3	5
2	2	4	3	2	2	3	4	4	2	4	4
3	3	4	4	1	2	2	3	4	3	4	5
2	3	3	2	2	2	3	3	2	3	3	4
2	3	4	1	2	2	3	4	3	2	3	5
3	3	3	4	2	2	3	4	4	3	3	5
2	4	3	4	2	2	2	2	2	4	4	5
3	4	4	2	2	2	3	3	4	2	3	4
2	3	3	4	2	3	3	4	4	2	3	5

Tokha (Tunnel Farms)

Environment	Economic	Social
Water Availability Adequate water through external sources such as wells and water tankers	**Economic Wellbeing** Better financial security and opportunities	**Community Support** Good support from community members
Soil Quality Good because of the use of only organic fertilizers	**Access to Food** Adequate availability of diverse food	**Outside Support** Lack of governmental support for organic farming and costs
Crop Yields Good for selective market-oriented crops (tomato, cucumber, off season vegetables)	**Market for Selling** Increasing because of a rise in demand for organic vegetables	**Farming Knowledge** Content with the use of poly-house technology
Urban Changes Concerned about land fragmentation	**Farming Costs** Manageable farming costs due to collaborative investments	**Future of Farming** Potential for commercially focused organic tunnel farming

Response to Survey

Population: 2000
Tunnel Farms: approx. 30

Farms Surveyed: 10 (33.3%)

1	Very Good	2	Good	3	No Change	4	Bad	5	Very Bad

Water Availability	Soil Quality	Crop Yield	Urban Changes	Economic Wellbeing	Access to Food	Market for Selling	Farming Costs	Community Support	Outside Support	Knowledge in Farming	Farming as a Job
1	2	2	4	2	2	2	2	3	4	1	2
1	1	2	3	1	2	2	3	2	3	2	2
1	1	2	4	1	2	2	3	3	4	2	2
1	2	2	3	2	2	2	3	2	2	1	2
1	1	2	4	1	2	2	3	2	2	2	2
1	2	2	5	1	2	1	2	2	4	1	2
1	2	2	4	2	2	1	2	1	4	2	2
1	2	2	4	1	2	2	2	1	4	1	2
1	2	2	3	2	2	1	1	1	2	2	2
1	1	2	3	1	2	1	1	1	2	1	2