This initial quantification of conflict generated debris in Aghdam is derived from official building footprint data provided by the Ministry of Economy/ State Committee on Property of Azerbaijan along with satellite imagery. This data was combined with an above surface height model, derived from the difference between a Digital Terrain Model (SRTM) and a Digital Surface Model (ALOS World 3D).

For visualization and modeling purposes, results were aggregated into an H3 hexagonal grid where each cell is 1.5 hectares wide.



----- Routes leading from debris to disposal site

Estimated debris quantities (tonnes)









SCENARIO 1 - ALL TO DISPOSAL Debris Management Outputs

Time to clear (months)	18
Time to recycle (months)	0
Total time to clear and recyle (months)	18
Total cost to clear (US\$)	4,100,000
Revenue from recycling (US\$)	0
Cost less revenue (US\$)	4,100,000
Total distance covered (km)	4,325,000
CO2e from trucking (tCO2)	8,000
Cost of haulage (US\$)	4,100,000
Material recovered for reconstruction (tonnes)	0
Material recovered for reconstruction (%)	0
Cost of processing of debris (US\$)	0
Value of recovered material in market (US\$)	0
Total cost of natural raw materials substituted (US\$)	0
Material disposed (tonnes)	2,998,755
Material disposed (%)	100
Total space required for disposal (ha)	37.5
Value of land taken by debris disposal (US\$/year)	43,000

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Page 2/5

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For visualization and modeling purposes, results were aggregated into an H3 hexagonal grid where each cell is 1.5 hectares wide.



Crushers and recycling depots ----- Routes leading from debris to

disposal and recycling sites











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SCENARIO 2 50% DECENTRALIZED RECYCLING Debris Management Outputs

Time to clear (months)	13
Time to recycle (months)	16
Total time do clear and recycle (months)	16
Total cost to clear (US\$)	5,600,000
Revenue from recycling (US\$)	2,600,000
Cost less revenue (US\$)	3,000,000
Total distance covered (km)	2,730,000
CO2e from trucking (tCO2)	2,100
Cost of haulage (US\$)	2,600,000
Material recovered for reconstruction (tonnes)	1,499,377
Material recovered for reconstruction (%)	50
Cost of processing of debris (US\$)	3,000,000
Value of recovered material in market (US\$)	2,600,000
Total cost of natural raw materials substituted (US\$)	4,334,000
Material disposed (tonnes)	1,900,000
Material disposed (%)	50
Total space required for disposal (ha)	24
Value of land taken by debris disposal (US\$/year)	28,000

Page 3/5

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Disposal site

— Routes leading from debris to disposal/recycling site

Estimated debris quantities





Datum: WGS 1984 Coordinate System: Universal Transverse Mercator 38N



SCENARIO 3 50% CENTRALIZED RECYCLING Debris Management Outputs

Time to clear (months)	17
Time to recycle (months)	41
Total time to clear and recycle (months)	41
Total cost to clear (US\$)	6,400,000
Revenue from recycling (US\$)	2,600,000
Cost less revenue (US\$)	3,800,000
Total distance covered (km)	4,325,000
CO2e from trucking (tCO2)	8,000
Cost of haulage (US\$)	3,500,000
Material recovered for reconstruction (tonnes)	1,499,377
Material recovered for reconstruction (%)	50
Cost of processing of debris (US\$)	2,998,755
Value of recovered material in market (US\$)	2,600,000
Total cost of natural raw materials substituted (US\$)	4,334,000
Material disposed (tonnes)	1,900,000
Material disposed (%)	50
Total space required for disposal (ha)	24
Value of land taken by debris disposal (US\$/year)	28,000

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Page 4/5

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SCENARIO 4 75% CENTRALIZED RECYCLING **Debris Management Outputs**

Time to clear (months)	17
Fime to recycle (months)	62
otal time to clear and ecycle (months)	62
Fotal cost to clear (US\$)	7,600,000
Revenue from recycling US\$)	3,900,000
Cost less revenue (US\$)	3,700,000
īotal distance covered km)	4,325,000
CO2e from trucking tCO2)	8,000
Cost of haulage (US\$)	3,100,000
Material recovered for econstruction (tonnes)	2,250,000
Material recovered for reconstruction (%)	75
Cost of processing of debris (US\$)	4,500,000
/alue of recovered naterial in market (US\$)	3,900,000
Total cost of natural raw naterials substituted US\$)	6,500,000
Material disposed tonnes)	1,400,000
Material disposed (%)	25
otal space required for disposal (ha)	18
/alue of land taken by tebris disposal	20,000

(US\$/year)

generated debris in Aghdam is derived from official building footprint data provided by the Ministry of Economy/ State Committee on Property of Azerbaijan along with satellite imagery. This data was combined with an above surface height model, derived from the difference between a Digital Terrain Model (SRTM) and a Digital Surface Model (ALOS World 3D).

For visualization and modeling purposes, results were aggregated into an H3 hexagonal grid where each cell is 1.5 hectares wide.



Disposal site

— Routes leading from debris to disposal/recycling site

Estimated debris quantities





Datum: WGS 1984 Coordinate System: Universal Transverse Mercator 38N

environment programme

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For visualization and modeling purposes, results were aggregated into an H3 hexagonal grid where each cell is 1.5 hectares wide.



industrial park

----- Routes leading from debris to disposal/recycling site

Estimated debris quantities





Datum: WGS 1984 Coordinate System: Universal Transverse Mercator 38N



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SCENARIO 5 75% INDUSTRIAL PARK RECYCLING Debris Management Outputs

Time to clear (months)	14
Time to recycle (months)	62
Total time to clear and recycle (months)	62
Total cost to clear (US\$)	6,900,000
Revenue from recycling (US\$)	3,900,000
Cost less revenue (US\$)	3,000,000
Total distance covered (km)	3,067,000
CO2e from trucking (tCO2)	5,600
Cost of haulage (US\$)	2,500,000
Material recovered for reconstruction (tonnes)	2,250,000
Material recovered for reconstruction (%)	75
Cost of processing of debris (US\$)	4,500,000
Value of recovered material in market (US\$)	3,900,000
Total cost of natural raw materials substituted (US\$)	6,500,000
Material disposed (tonnes)	1,400,000
Material disposed (%)	25
Total space required for disposal (ha)	18
Value of land taken by debris disposal (US\$/year)	20,000